AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-00500 Scope, purpose, and authority. This chapter is authorized by chapter 70.87 RCW covering elevators, lifting devices, ((~~and~~)) moving walks, and other conveyances. The purpose of this chapter is to:

(1) Provide for the safe design, mechanical and electrical operation, ((~~construction, installation, alteration, inspection, relocation, and repair of conveyances;~~)) and inspection of conveyances, and performance of conveyance work;

(2) Ensure that all such operation, ((~~construction, installation, alteration, inspection, and repair~~)) design inspection, and conveyance work subject to the provisions of this chapter will be reasonably safe to persons and property and in conformity with the provisions of this chapter and the applicable statutes of the state of Washington.

(3) Establish and ensure compliance with the minimum standards for becoming a licensed elevator contractor and/or licensed elevator mechanic performing work on elevators or other conveyances covered by chapter 70.87 RCW and this chapter.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-00600 What rules apply to your conveyance? Elevators and other conveyances must comply with the rules adopted by the department that were in effect at the time the conveyance was permitted, regardless of whether the rule(s) has been repealed, unless any new rule specifically states that it applies to all ((~~elevators~~)) conveyances, regardless of when the ((~~elevator~~)) conveyance was permitted. Copies of previous rules adopted by the department are available upon request.

Please note, if the ((~~elevator~~)) conveyance is altered ((~~it~~)) the components associated with the alteration must comply with all of the applicable rules adopted by the department in effect at the time the conveyance was altered. If the department determines that a conveyance was altered without a permit and inspection, the alteration will be required to comply with the applicable rules adopted by the department at the time the noncompliant alteration was identified.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-00650 Which National Elevator Codes and Supplements has the department adopted?

NATIONAL ELEVATOR CODES AND SUPPLEMENTS ADOPTED				
TYPE OF CONVEYANCE	NATIONAL CODE AND SUPPLEMENTS	DATE INSTALLED		COMMENTS
		FROM	TO	
Elevators, Dumbwaiters, Escalators	American Standard Safety Code (ASA) A17.1, 1960	Prior to 11/1/1963		Adopted Standard Part X of ASA applies to all installations in existence prior to 11/1/63.
Elevators, Dumbwaiters, Escalators	American Standard Safety Code (ASA) A17.1, 1960	11/1/1963	12/29/1967	Adopted Standard
Moving Walks	American Safety Association A17.1.13, 1962	11/1/1963	12/29/1967	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	U.S.A. Standards (USAS) USAS A17.1, 1965; Supplements A17.1a, 1967; A17.1b, 1968; A17.1c, 1969;	12/30/1967	2/24/1972	Adopted Standard USAS 1965 includes revision and consolidation of A17.1-1, 1960, A17.1a, 1963, and A17.1-13, 1962. Adopted code and supplements, excluding Appendix E and ANSI 17.1d, 1970.
Elevators, Dumbwaiters, Escalators, and Moving Walks	American National Standard Institute ANSI A17.1, 1971	2/25/1972	6/30/1982	Adopted Standard as amended and revised through 1971.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1971; A17.1a, 1972	2/25/1972	6/30/1982	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1981	7/1/1982	1/9/1986	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1982	3/1/1984	1/9/1986	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1983	12/1/1984	1/9/1986	Adopted Supplement, except portable escalators covered by Part VIII of A17.1b, 1983.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1984	1/10/1986	12/31/1988	Adopted Standard Except Part XIX. After 11/1/1988 Part II, Rule 211.3b was replaced by WAC 296-81-275.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1985	1/10/1986	12/31/1988	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1985; A17.1c, 1986; A17.1d, 1986; and A17.1e, 1987	12/6/1987	12/31/1988	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1987	1/1/1989	12/31/1992	Adopted Standard Except Part XIX and Part II, Rule 211.3b. WAC 296-81-275 replaced Part II, Rule 211.3b.

Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1990	1/1/1993	2/28/1995	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1993	3/1/1995	6/30/1998	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 1996	6/30/1998	((~~Current~~)) Effective date of these rules	Adopted Standard Except Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 2000; A17.1a, 2002; A17.1b, 2003	Effective date of these rules	Current	Adopted Standards and Addenda Except Rules 2.4.12.2, 8.6.5.8 and Sections 5.4, 7.4, 7.5, 7.6, 7.9, 7.10, 8.10.1.1.3 and 8.11.1.1.
Safety Standards for Platform Lifts and Stairway Chairlifts	ASME A18.1, 1999; A18.1a, 2001; A18.1b, 2001	Effective date of these rules	Current	Adopted Standards and Addenda.
Note: Copies of codes and supplements can be obtained from The American Society of Mechanical Engineers, Order Department, 22 Law Drive, Box 2900, Fairfield, New Jersey, 07007-2900 or by visiting www.asme.org.				

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-00700 Chapter definitions. The following ((~~general~~)) definitions apply to this chapter (see RCW 70.87.010 for additional definitions necessary for use with this chapter):

"ANSI" means the American National Standard Institute.

"ASA" means the American Safety Association.

"ASME" means the American Society of Mechanical Engineers.

((~~**"Automobile parking elevator"** means an elevator that is located in either a stationary or horizontally moving hoistway and is used exclusively for parking automobiles.~~

~~(a) During the parking process, each automobile moves onto or off of the elevator under its own power or by a power driven transfer device into parking spaces or cubicles directly in line with the elevator.~~

~~(b) Normally, no person is stationed on any level except the receiving level.~~

~~**"Belt manlift"** means a power-driven endless belt with steps or platforms and handholds used for the transportation of personnel from floor to floor.~~

~~**"Boat launching elevator"** means an elevator that:~~

~~(a) Serves a boat launching structure and a beach or water surface; and~~

~~(b) Is used for carrying or handling boats in which people ride.~~

~~**"Casket lift"** means a lift that:~~

(a) Is installed at a mortuary;

(b) Is designed exclusively for carrying caskets;

(c) Moves in guides in basically a vertical direction; and

(d) Serves two or more floors or landings.

"Code" refers to nationally accepted codes (i.e. ASME, ANSI, ASA, and NEC) and/or the Washington Administrative Code.

"Conveyance" means an elevator, escalator, dumbwaiter, belt manlift, automobile parking elevator, moving walk, as well as, other elevating devices defined in this chapter.

"Department" means the department of labor and industries.

"Director" means the director of the department or the director's representative.

"Direct-plunger hydraulic elevator" means a hydraulic elevator with a plunger or cylinder attached to the car frame or platform.

"Dumbwaiter" means a hoisting and lowering mechanism equipped with a car that:

(a) Moves in guides in substantially a vertical direction;

(b) Has a floor area that does not exceed 9 square feet;

(c) Has an inside height that does not exceed 4 feet;

(d) Has a capacity that does not exceed 500 pounds; and

(e) Is used exclusively for carrying materials.

"Electric elevator" means an elevator powered by an electric driving machine.

"Electro-hydraulic elevator" means a direct-plunger elevator where a pump driven by an electric motor pumps liquid, under pressure, directly into the cylinder.

"Elevator" means:

(1) A hoisting or lowering machine;

(2) Equipped with a car or platform that moves in guides; and

(3) Services two or more floors or landings of a building or structure.

"Escalator" means a power-driven, inclined, continuous stairway used for raising and lowering passengers.

"Freight elevator" means an elevator:

(a) Used primarily for carrying freight; and

(b) Whose passengers are limited to the operator, people needed to load and unload freight, and other employees approved by the department.

"Hand elevator" means an elevator where manual energy moves the car.

"Hydraulic elevator" means an elevator powered by a plunger or piston moved by pressurized liquid in a cylinder.

"Inclined elevator" means an elevator that travels at an inclined angle of 70 degrees or less from the horizontal.

"Inspector" means a department elevator inspector or an inspector in a municipality with an elevator ordinance in effect according to RCW 70.87.200.

"Limited-use/limited-application elevator (LULA)" means a powered passenger elevator whose use and application is limited by size, capacity, speed, and rise. It is principally used for vertically transporting people with physical disabilities.

"Maintained-pressure hydraulic elevator" means a direct-plunger elevator where pressurized liquid is always available for transfer into the cylinder.

"Material hoist" means a hoist that is:

(a) Not part of a permanent structure;

(b) Installed inside or outside buildings during construction, alteration, or demolition;

(c) Used to raise or lower materials associated with the building project; and

"Material lift" means a lift that is not part of a conveying system and is:

(a) Permanently installed in a commercial or industrial area;

(b) Not accessible to the general public or intended to be operated by the general public.

"Moving walk" means a passenger-carrying device on which:

(a) Passengers stand or walk; and

(b) The carrying surface remains parallel to its direction of motion.

"Multideck elevator" means an elevator having two or more compartments located one immediately above the other.

"NEC" means the National Electrical Code.

"Observation elevator" means an elevator designed for exterior viewing by passengers while the car is traveling.

"One-man capacity manlift" means a single passenger device that:

(a) Is either hand-powered counterweighted or electric-powered;

(b) Travels vertically in guides; and

(c) Serves two or more landings.

"Owner" means any person having title to or control of a conveyance, as guardian, trustee, lessee, or otherwise.

"Passenger elevator" means an elevator used to carry passengers but may also be used to carry freight or materials if the load does not exceed the capacity of the elevator.

"Permit" means a permit issued by the department to construct, alter, install, relocate, or operate a conveyance.

"Person" means an individual, this state, a political subdivision of this state, any public or private corporation, any firm, or any other entity.

"Personnel hoist" means a hoist that is:

(a) Not part of a permanent structure;

(b) Installed inside or outside buildings during construction, alteration or demolition;

(c) Used to raise or lower workers and other persons

~~associated with the building project; and~~

~~(d) Used for the transportation of materials when necessary.~~

~~**"Power elevator"** means an elevator using energy, other than gravitational or manual energy, to move the car.~~

~~**"Private residence conveyance"** means a conveyance installed in or on the premises of a single-family dwelling and used to transport people or property from one elevation to another.~~

~~**"Rack and pinion elevator"** means a power elevator, with or without counterweights, supported, raised and lowered by a motor(s) driving a pinion(s) on a stationary rack mounted in the hoistway.~~

~~**"Rooftop elevator"** means a powered passenger or freight elevator that operates between a roof level landing and a landing below and opens, horizontally, onto a building roof.~~

~~**"Roped hydraulic elevator"** means a hydraulic elevator with its plunger or piston coupled to the car by wire ropes and sheaves.~~

~~**"Screw column elevator"** means a powered elevator with a non-counterweighted car supported, raised and lowered by a screw thread.~~

~~**"Sidewalk elevator"** means a freight elevator that operates between the sidewalk or other areas outside a building and the building floor levels below; and~~

~~(a) At its upper travel limit, has no landing opening into the building; and~~

~~(b) Is not used to carry automobiles.~~

~~**"Special purpose personnel elevator"** means an elevator that is limited in size, capacity, and speed and is:~~

~~(a) Permanently installed in grain elevators, radio antennas, bridge towers, underground facilities, dams, power plants and similar structures; and~~

~~(b) Used to vertically transport authorized personnel, their tools and equipment.~~

~~**"Stairway chair lift"** means a lift that travels in an inclined direction and is designed for use by disabled persons.~~

~~**"USAS"** means the U.S.A. Standards.~~

~~**"WAC"** means the Washington Administrative Code.~~

~~**"Wheelchair lift"** means a lift that travels in a vertical or inclined direction and is designed for use by wheelchair users.~~

~~**"Workmen's construction elevator"** means a permanent elevator used temporarily during construction for personnel and materials.~~)) **"Acceptable proof"** refers to the documentation that must be provided to the department during the elevator contractor and mechanic license application and renewal process. Acceptable proof may include department-approved forms documenting years of experience, affidavits, letters from previous employers, declarations of experience, education

credits, copies of contractor registration information, etc. Additional documentation may be requested by the department to verify the information provided on the application.

"Code" refers to nationally accepted codes (i.e., ASME, ANSI, ASA, and NEC) and/or the Washington Administrative Code.

"Decommissioned conveyance" means an installation whose power feed lines have been disconnected and:

(a) A traction elevator, dumbwaiter, or material lift whose suspension ropes have been removed, whose car and counterweight rests at the bottom of the hoistway, and whose hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side;

(b) A hydraulic elevator, dumbwaiter, or material lift whose: Car rests at the bottom of the hoistway, pressure piping has been disassembled and a section removed from the premises, hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side, suspension ropes have been removed and counterweights, if provided, landed at the bottom of the hoistway; or

(c) An escalator or moving walk whose entrances have been permanently barricaded.

"Final judgment" means any money that is owed the department as the result of an individual's or firm's unsuccessful appeal of a civil penalty. Final judgment also includes any penalties assessed against an individual or firm owed the department as a result of an unappealed civil penalty or any outstanding fees due under chapter 70.87 RCW and this chapter.

"General direction--Installation and alteration work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) who is on the same job site as the helper/apprentice at least seventy-five percent of each working day. The ratio of helper to mechanic shall be one-to-one.

"General direction--Maintenance work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) to ensure that the maintenance work is performed safely and to code.

"Lockout" means the placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

"Primary point of contact" is the designated individual employed by a licensed elevator contractor.

"Red tag" or **"red tag status"** means an elevator or other conveyance that has been removed from service and operation because of noncompliance with chapter 70.87 RCW and this chapter or at the request of the owner.

"Private residence elevator" (residential elevator) means a power passenger elevator which is limited in size, capacity, rise and speed and is installed in a private residence or multiple dwelling as a means of access to a private residence provided the elevators are so installed that they are not accessible to the general public or to other occupants in the building.

"RCW" means the Revised Code of Washington.

"Tagout" means the placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

"Traction elevator" means an elevator in which the friction between the hoist ropes and the machine sheave is used to move the elevator car.

"USAS" means the U.S.A. Standards.

"WAC" means the Washington Administrative Code.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-00800 Advisory committee on conveyances. (1) The purpose of the advisory committee is to advise the department on the adoption of regulations that apply to conveyances; methods of enforcing and administering the elevator law, chapter 70.87 RCW; and matters of concern to the conveyance industry and to the individual installers, owners and users of conveyances.

(2) The advisory committee consists of ((~~five persons~~)) seven members appointed by the director ((~~of the department with the advice of the chief of the elevator section~~)) or his or her authorized representative.

(3) The committee members shall serve four years. However, if a member is unable to fulfill his or her obligations, a new member may be appointed.

(4) The committee shall meet on the third Tuesday of February, May, August, and November of each year, and at other times at the discretion of the chief of the elevator section. ((~~The committee members shall serve without per diem or travel expenses.~~))

(5) The chief of the elevator section shall be the secretary for the advisory committee.

(6) An advisory committee member may appoint an alternate to attend meetings in case of conflict or illness.

NEW SECTION

WAC 296-96-00805 Appeal rights and hearings. (1) Chapter 70.87 RCW provides the authority for the duties and responsibilities of the department. Except as provided in chapter 70.87 RCW and this chapter, all appeals and hearings will be conducted according to chapter 34.05 RCW, the Administrative Procedure Act and chapter 10-08 WAC, Model Rules of Procedure.

(2) A person who contests a notice of violation or infraction issued by the department may request a hearing. The request for a hearing must be:

(a) In writing;

(b) Accompanied by a certified or cashier's check, payable to the department, for two hundred dollars; and

(c) Postmarked or received by the department within fifteen days after the person receives the department's violation notice.

(3) In all appeals of chapter 70.87 RCW and this chapter the appellant has the burden of proof by a preponderance of the evidence.

PART B - ((~~REGULATIONS~~)) LICENSES AND FEES FOR ALL ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER CONVEYANCES

NOTE: Total fees include the sum of the permit cost plus plan check fees.

NEW SECTION

WAC 296-96-00900 In general, who is required to be licensed under this chapter? (1) Any person, firm, or company wishing to engage in the business of conveyance work regulated under chapter 70.87 RCW and this chapter must be a licensed elevator contractor.

(2) Any person wishing to perform conveyance work regulated under chapter 70.87 RCW and this chapter must be a licensed elevator mechanic employed by a licensed elevator contractor.

NEW SECTION

WAC 296-96-00902 Are there exceptions from the elevator mechanic licensing requirements? Yes.

(1) Elevator mechanic licenses issued under chapter 70.87 RCW and this chapter are not required for:

(a) Individuals who install signal systems, fans, electric light fixtures, illuminated thresholds and feed wires to the terminals on the elevator main line control provided that the individual does not require access to the pit, hoistway, or top of the car for the installation of these items.

(b) An owner or regularly employed employee of the owner performing only maintenance work of conveyances in accordance with RCW 70.87.270.

(2) Elevator mechanic licenses may not be required for certain types of incidental work that is performed on conveyances when the appropriate lockout and tagout procedures have been performed by a licensed elevator mechanic in the appropriate category. The department must be notified and must approve the scope of work prior to it being performed.

NEW SECTION

WAC 296-96-00903 Are there exceptions from the elevator contractor licensing requirements? Yes. Elevator contractor licenses issued under chapter 70.87 RCW and this chapter are not required for:

(1) An owner or regularly employed employee of the owner performing only maintenance work of conveyances in accordance with RCW 70.87.270.

(2) A public agency that employs licensed elevator mechanics to perform maintenance.

NEW SECTION

WAC 296-96-00904 What must you do to become and remain a licensed elevator contractor? (1) Obtain and maintain a valid specialty or general contractor registration under chapter 18.27 RCW to engage in the business of conveyance work.

(2) Complete and submit a department-approved application. As part of the application:

(a) Specify the employee who is the licensed elevator contractor's primary point of contact.

(b) The person, firm or company who is applying for the elevator contractor's license must:

(i) Provide acceptable proof to the department that shows that the person, firm, or company has five years of work experience in performing conveyance work as verified by current and previous elevator contractor licenses to do business; or

(ii) Pass a written examination administered by the department on chapter 70.87 RCW and this chapter. (In the case of a firm or company, the exam will be administered to the designated primary point of contact.)

(iii) Failure to pass the examination will require the submittal of a new application.

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application of a license under this section if the applicant owes outstanding final judgments to the department.

(5) If the primary point of contact identified in subsection (2)(a) of this section separates employment, his/her relationship or designation is terminated, or death of the designated individual occurs, the elevator contractor must, within ninety days, designate a new individual who has successfully completed the elevator contractor examination and inform the department of the change in writing or the elevator contractor license will be automatically suspended.

NEW SECTION

WAC 296-96-00906 What must you do to become a licensed elevator mechanic? (1) Qualify for licensing:

(a) For conveyance work covered by all categories identified in WAC 296-96-00910 except material lifts (05),

residential conveyances (06), residential inclined elevators (07) and temporary licenses (09), the applicant must comply with the applicable mechanic licensing requirements as follows:

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than three years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state or as an employee of a public agency; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than three years' work experience in the elevator industry, performing conveyance work, as verified by current and previous employers licensed to do business in this state or as an employee of a public agency; and

(B) Have worked without direct and immediate supervision for an elevator contractor licensed to do business in this state or as an employee of a public agency. This employment may not be less than three years immediately before March 1, 2004.

(iii) National exam/education.

(A) Have obtained a certificate of completion and successfully passed the mechanic examination of a nationally recognized training program for the elevator industry such as the National Elevator Industry Educational Program or its equivalent; or

(B) Have obtained a certificate of completion of an apprenticeship program for an elevator mechanic, having standards substantially equal to those of chapter 70.87 RCW and this chapter, and registered with the Washington state apprenticeship and training council under chapter 49.04 RCW.

(iv) Reciprocity. The applicant must provide acceptable proof to the department that shows that the applicant is holding a valid license from a state having entered into a reciprocal agreement with the department and having standards substantially equal to those of chapter 70.87 RCW and this chapter.

(b) For conveyance work performed on material lifts as identified in WAC 296-96-00910(5):

(i) Test.

(A) The applicant and the licensed elevator contractor/employer must comply with the provisions of RCW 70.87.245; and

(B) The applicant must pass an examination administered by the department on chapter 70.87 RCW and this chapter;

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the material lift license category (see WAC 296-96-00910) performing conveyance work on material lifts, as verified by current and previous employers licensed to do business in this state; and

(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than three years immediately before March 1, 2004.

(c) For residential conveyance work covered by category (06) as identified in WAC 296-96-00910:

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than two years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the residential conveyance license category (see WAC 296-96-00910) performing conveyance work on residential inclined and vertical wheelchair lifts and stair chairlifts, as verified by current and previous employers licensed to do business in this state; and

(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than two years immediately before March 1, 2004.

(d) For residential inclined conveyance work covered by category (07) as identified in WAC 296-96-00910;

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than one year's work experience in the elevator industry or not less than three years' documented experience and education credits in conveyance work as described in category (01) performing conveyance work as

verified by current and previous employers licensed to do business in this state; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the residential inclined conveyance license category (see WAC 296-96-00910) performing conveyance work on residential inclined conveyances, as verified by current and previous employers licensed to do business in this state; and

(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than one year immediately before March 1, 2004.

(e) For temporary mechanic licenses as identified in WAC 296-96-00910 category (09) the applicant must provide acceptable proof from a licensed elevator contractor that attests that the temporary mechanic is certified as qualified and competent to perform work under chapter 70.87 RCW and this chapter.

(2) Complete and submit a department-approved application.

(a) **Applications received before October 1, 2004.** If an applicant who meets subsection (1)(d)(i)(A) of this section, who applies before October 1, 2004, and is required to take an examination under the provisions of this section, the applicant may perform the duties of a licensed elevator mechanic until the applicant has been provided notice by the department of the results of his/her examination.

(b) **Applications received on or after October 1, 2004.** An applicant who is required to take an examination under the provisions of this section may not perform the duties of a licensed elevator mechanic until the applicant has been notified by the department that he/she has passed the examination.

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application of a license under this section if the applicant owes outstanding final judgments to the department.

NEW SECTION

WAC 296-96-00910 What are the elevator mechanic license categories? The following are the licensing categories for qualified elevator mechanics or temporary elevator mechanics:

(1) **Category (01):** A general elevator mechanic license

encompasses mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of all types of elevators and other conveyances in any location covered under chapter 70.87 RCW and this chapter.

(2) **Category (02):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following commercial and residential conveyances:

(a) Wheelchair lifts;

(b) Dumbwaiters; and

(c) Incline chairlifts.

Note: Work experience on residential conveyances in (a)(i), (ii), and (iii) of this subsection may not be applied toward the category (02) license requirements.

(3) **Category (03):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following conveyances in industrial sites and grain terminals:

(a) Electric and hand powered manlifts;

(b) Special purpose elevators; and

(c) Belt manlifts.

(4) **Category (04):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following conveyances:

(a) Temporary personnel hoists;

(b) Temporary material hoists; and

(c) Special purpose elevators.

(5) **Category (05):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of material lifts.

(6) **Category (06):**

(a) This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following conveyances:

(i) Residential wheelchair lifts;

(ii) Residential dumbwaiters; and

(iii) Residential incline chairlifts.

(b) Work experience on conveyances in (a)(i), (ii), and (iii) of this subsection may not be applied toward the category (02) license requirements.

Note: Maintenance work performed by the owner or at the direction of the owner is exempted from licensing requirements provided that the owner resides in the residence at which the conveyance is located and the conveyance is not accessible to the general public. Such exempt work does not count toward work experience for licensure.

(7) **Category (07):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of residential inclined elevators.

Note: Maintenance work performed by the owner or at the direction of the owner is exempted from licensing requirements

provided that the owner resides in the residence at which the conveyance is located and the conveyance is not accessible to the general public. Such exempt work does not count toward work experience for licensure.

(8) **Category (08):** This license is limited to maintenance of all conveyances and is further limited to employees of public agencies to obtain and maintain the license. This work should not count towards other licenses.

(9) **Category (09):** This temporary license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of conveyances. This license is limited to individuals that are certified as qualified and competent by licensed elevator contractors. The individual must be an employee of the licensed elevator contractor. The contractor shall furnish acceptable proof of competency as the department may require. Each license must recite that it is valid for a period of thirty days from the date of issuance and for such particular elevators or geographical areas as the department may designate, and otherwise entitles the licensee to the rights and privileges of an elevator mechanic license issued under chapter 70.87 RCW and this chapter.

NEW SECTION

WAC 296-96-00912 How long is the elevator contractor, elevator mechanic, and temporary mechanics licensing period and what is required for renewal? (1) Elevator contractors.

(a) The renewal period is two years from the date of issuance.

(b) As part of the renewal process the elevator contractor must:

(i) Complete and submit a department-approved application.

(ii) Designate an employee as a primary point of contact.

(iii) Pay the fees specified in WAC 296-96-00922.

(2) Elevator mechanics.

(a) The renewal period is two years from the date of your birthday. The initial license may be for a shorter period as follows. If your birth year is:

(i) In an even-numbered year, your certificate will expire on your birth date in the next even-numbered year.

(ii) In an odd-numbered year, your certificate will expire on your birth date in the next odd-numbered year.

(b) As part of the renewal process you must:

(i) Complete and submit a department-approved application.

(ii) Have attended an approved continuing education course and submitted a certificate of completion for the course. The course must consist of not less than eight hours of instruction

that must have been attended and completed within one year immediately preceding any license renewal.

(iii) Pay the fees specified in WAC 296-96-00922.

(3) Temporary elevator mechanics.

(a) The renewal period is thirty days from the date of issuance.

(b) As part of the renewal process you must:

(i) Complete and submit a department-approved application.

(ii) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny renewals of licenses under this section if the applicant owes outstanding final judgments to the department.

NEW SECTION

WAC 296-96-00914 Where can you obtain information regarding department-approved continuing education course providers? The department will produce a list of all approved training course providers and/or course contact persons that provide continuing education courses required under chapter 70.87 RCW and this chapter. This list will be available to all renewal applicants who request it.

The department may also provide continuing education training.

NEW SECTION

WAC 296-96-00916 Who approves and what is the process for becoming a continuing education course provider? (1) The department approves continuing education course providers.

(2) The department will review and approve courses.

(a) All providers seeking course approval must submit the required information to the department on a form provided by the department.

(b) The courses must be taught by instructors through continuing education providers; courses may include but are not limited to, association seminars and labor training programs.

(c) All instructors must be approved by the department and are exempt from the requirements of WAC 296-96-00912 (2)(b)(ii) with regard to his or her application for license renewal, provided that such applicant was qualified as an instructor at any time during the one year immediately preceding the scheduled

date for such renewal and the instructor must teach two or more courses in the year preceding the renewal.

(d) All training courses must conform to and be based upon current standards and requirements governing the operation, construction, installation, alteration, inspection and repair of elevators and other conveyances.

(e) All course approval requests must include:

(i) A general description of the course, including its scope, the instructional materials to be used and the instructional methods to be followed;

(ii) A detailed course outline;

(iii) The name and qualifications of the course instructor(s);

(iv) The locations where the course will be taught;

(v) The days and hours the course will be offered; and

(vi) The specific fees associated with the course, as well as, the total cost of the course.

(f) Training courses will be approved for a two-year period.

(g) It is the responsibility of the provider to annually review and update its courses and to notify the department of any changes.

(h) The department may withdraw its approval of any training course if it determines the provider is no longer in compliance with the requirements of this chapter. If the department withdraws its approval of a training course, it will give the provider written notification of the withdrawal, specifying the reasons for its decision.

(i) Approved training providers must keep uniform records, for a period of ten years, of attendance of licensees and these records must be available for inspection by the department at its request. The provider must submit a list of names of the attendees to the department on or before thirty days after the date of the course being held. Approved training providers are responsible for the security of all attendance records and certificates of completion. Falsifying or knowingly allowing another to falsify attendance records or certificates of completion constitutes grounds for suspension or revocation of the approval required under this section.

NEW SECTION

WAC 296-96-00918 Who is exempt from the continuing education requirements? The following individuals are exempt from continuing education requirements:

(1) A licensee who is unable to complete the continuing education course required under this section before the expiration of his or her license due to a temporary disability may apply for a waiver from the department. Application shall be made on a form provided by the department and signed under the penalty of perjury and accompanied by a certified statement from a competent physician attesting to the temporary disability. Upon the termination of the temporary disability, the licensee must submit to the department a certified statement from the same physician, if practicable, attesting to the termination of the temporary disability at which time a waiver sticker, valid for ninety days, must be issued to the licensee and affixed to his or her license.

The licensee can work during the time that a certified statement from the physician is submitted to the department. The licensee has ninety days from this date to take the required courses in order to renew his/her license. If the licensee has not taken the required courses on or before the ninetieth day from the date the certified statement was sent in to the department, he/she will no longer be able to perform work.

(2) Approved instructors under WAC 296-96-00916 with regard to his or her application for license renewal, provided that such applicant was qualified as an instructor at any time during the one year immediately preceding the scheduled date for such renewal and that the instructor must teach two or more courses in the year preceding the renewal.

NEW SECTION

WAC 296-96-00920 When and where are elevator licensing examinations held? Examinations shall be held at locations and times when considered necessary by the department. The department will notify qualified applicants of the date, time, and location of the examination.

NEW SECTION

WAC 296-96-00922 What are the fees associated with licensing? The following are the department's elevator license fees:

Type of Fee	Period Covered by Fee	Dollar Amount of Fee
Elevator contractor/mechanic application fee (not required for renewal of valid license)	Per application	$50.00
Elevator contractor/ mechanic examination fee	Per application	$150.00
Reciprocity application fee*	Per application	$50.00
Elevator mechanic license	2 years	$100.00
Elevator contractor license	2 years	$100.00
Temporary elevator mechanic license	30 days	$25.00
Elevator mechanic/contractor timely renewal fee**	2 years	$100.00
Elevator mechanic/contractor late renewal fee***	2 years	$200.00
Training provider application/renewal fee	2 years	$100.00
Continuing education course fee by approved training provider****	1 year	Not applicable
Replacement of any licenses		$15.00
Refund processing fee		$30.00

* Reciprocity application is only allowed for applicants who are applying for licensing based upon possession of a valid license that was obtained in state(s) with which the department has a reciprocity agreement.

** Renewals will be considered "timely" when the renewal application is received on or prior to the expiration date of the license.

*** Late renewal is for renewal applications received no later than ninety days after the expiration of the licenses. If the application is not received within ninety days from license expiration, the licensee must reapply and pass the competency examination.

**** This fee is paid directly to the continuing education training course provider approved by the department.

NEW SECTION

WAC 296-96-00924 What procedures does the department follow when issuing a civil penalty for licensing violations? (1) If the department determines that an individual has violated the licensing requirements of chapter 70.87 RCW or this chapter, the department may issue a civil penalty describing the reasons for the violation(s). The department may issue a civil penalty to:

(a) A person who is advertising, offering to do work or submitting a bid to perform conveyance work, or employing elevator mechanics and does not have a valid elevator contractor's license as required under chapter 70.87 RCW or this chapter; or

(b) An individual who is working under chapter 70.87 RCW or this chapter and does not have a valid elevator mechanic license.

(2) A person may appeal a civil penalty issued under chapter 70.87 RCW or this chapter.

(3) The following enforcement schedule will be used for licenses issued under chapter 70.87 RCW and this chapter:

(a) **July 1, 2004, through September 30, 2004.** Any individual, firm, or company that is found in violation of the licensing requirements will be notified of the violation and be allowed ten calendar days to make application with the department to avoid being issued a civil penalty. If the individual, firm, or company does not make application within ten calendar days they will be issued a civil penalty.

(b) **On or after October 1, 2004.** Any individual, firm, or company that is found in violation of the licensing requirements may be issued a civil penalty.

NEW SECTION

WAC 296-96-00926 What are the civil (monetary) penalties for violating the licensing requirements of chapter 70.87 RCW or this chapter? (1) A person cited for a violation under chapter 70.87 RCW or this chapter may be assessed a civil (monetary) penalty based upon the following schedule:

First Violation	$500.00

Each additional Violation $500.00

(2) Each day a person, firm or company is in violation may be considered a separate violation.

(3) Each job site at which a person is in violation may be considered a separate violation.

(4) The department must serve notice by certified mail to a person for a violation of chapter 70.87 RCW or this chapter.

NEW SECTION

WAC 296-96-00930 What if I owe outstanding final judgments to the department? The department may deny renewal or application of, or suspend your license if you have an outstanding final judgment.

PART B - ((~~REGULATIONS~~)) LICENSES AND FEES FOR ALL ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER CONVEYANCES

NOTE: Total fees include the sum of the permit cost plus plan check fees.

PART B-1 - REGULATIONS AND FEES FOR ALL ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER CONVEYANCES

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-01000 What is the permit process for conveyances? (1) Prior to the start of the construction, alteration, or relocation((~~,~~)) of all conveyances (this includes both private residence and commercial conveyances) ((~~your~~)) plans must be submitted to and approved by the department. See WAC 296-96-01030.

(2) Prior to construction, alteration, or relocation of any conveyance, you must get an installation permit from the department. See WAC 296-96-01010 ((~~and 296-96-01015~~)) through

296-96-01025.

(3) Your conveyance must be inspected upon completion of the construction, alteration, or relocation. See WAC 296-96-01035.

(4) You must obtain and renew an annual operating permit for each conveyance that you own, except for residential conveyances. See WAC 296-96-01065.

(5) After initial purchase and inspection private residence conveyance(s) do not require an annual permit. However, annual inspections may be conducted upon request. See WAC 296-96-01065 for the associated fees.

AMENDATORY SECTION (Amending WSR 03-12-045, filed 5/30/03, effective 6/30/03)

WAC 296-96-01005 When do I need a permit? (1) You must obtain a permit from the department before you begin constructing, altering or relocating any conveyance ((~~as described in the definitions for this chapter~~)). To obtain your permit, you need to complete the permit application and pay the appropriate fee. Once your application is approved, a permit will be issued and you may begin work on your project.

(2) Construction and alteration permits are valid for one year from the date of issue((~~,~~)). However, permits may be renewed if you:

(a) Apply for a renewal permit before your current permit expires;

(b) The department approves your request for a renewal permit; and

(c) You pay a fifty-dollar renewal fee to the department for each permit you renew; ((~~and~~

~~(d)~~)) (3) If your permit has expired you must reapply for a new permit.

((~~(3)~~)) (4) You are not required to obtain permits and pay fees for repairs and replacement associated with normal functions and necessary maintenance done with parts of equivalent materials, strength and design; or for any conveyance exempted by RCW 70.87.200.

NEW SECTION

WAC 296-96-01006 What type of conveyance work requires permitting and inspection? (1) All installations and relocation of conveyances requires permitting and inspection. All conveyance work must be performed by an elevator mechanic licensed to perform work in the appropriate category. (See WAC 296-96-00910).

(2) All alterations and other conveyance work requires permitting and inspection and includes but is not limited to:

(a) Items identified in ASME A17.1.

(b) Any conveyance work that requires the conveyance to be tested prior to being returned to service, including:

(i) The replacement or repair of any parts, the installation of which would require recalibration or testing (e.g., brakes, hydraulic valves and piping, safeties, door reopening devices, governors, communication systems, cab interiors, car/hall buttons, etc.); or

(ii) Work performed on components or equipment affecting or necessary for fire and life safety (e.g., cab interiors, systems associated with fire recall, etc.).

Contact the department if you have any questions or need assistance determining if a permit and inspection are required.

NEW SECTION

WAC 296-96-01007 What is the inspection and approval process for alterations? (1) The following process must be followed when performing alterations:

(a) Obtain a permit from the department prior to performing the alteration. The permit application must include detailed information on the scope of the alteration.

(b) Take the conveyance out-of-service and perform the alteration.

(c)(i) If the conveyance requires an inspection prior to being returned to service (as identified on the alteration permit), you must contact the department to perform an inspection and:

(A) If the conveyance passes the inspection, the conveyance may be placed back into service.

(B) If the conveyance fails the inspection, the conveyance

must remain out-of-service until the corrections are made and approved by the department.

(ii) If the conveyance is not required to be inspected prior to being returned to service, you must contact the department to perform an inspection and:

(A) If the conveyance passes the inspection, the conveyance may remain in service.

(B) If the conveyance fails the inspection, the conveyance will be placed out-of-service until the corrections are made and approved by the department.

(2) For certain types of alterations additional work may be required as part of the alteration and prior to approval of the conveyance. These alterations include, but are not limited to:

(a) Replacements of controllers:

(i) Fire fighter service requirements must be met in accordance with the most recent code adopted by the department.

(ii) Seismic requirements ("ring and string" or "shaker box") must be met in accordance with the most recent code adopted by the department. In addition, the car must be capable of moving away from the floor.

(iii) Lighting in the machine room and pit must comply with the most recent code adopted by the department.

(iv) Electrical outlets in the machine room and pit must be of the ground fault interrupter type.

(b) Replacement of controllers and a car operating panel and/or hall fixtures:

(i) The requirements of (a) of this subsection must be met.

(ii) All panels and fixtures must meet the applicable (e.g., height, sound, Braille, etc.) requirements in accordance with the Americans with Disabilities Act.

(c) Replacement of door operators and/or door equipment: Any changes to these items require the installation of door restrictors:

(d) Hydraulic piping: Replacement, repair, or relocation of hydraulic piping will require the installation of a rupture valve.

Note: The department may grant exceptions to the requirements identified in this section.

NEW SECTION

WAC 296-96-01009 Who can purchase a permit? The department may only issue a permit for conveyance work to a licensed elevator contractor.

Permits are only required for alterations and installations. Beginning with the effective date of these

rules, the homeowner will no longer be allowed to purchase a permit.

AMENDATORY SECTION (Amending WSR 02-12-022, filed 5/28/02, effective 6/28/02)

WAC 296-96-01010 What are the installation permit fees for conveyances, material lifts, and ~~hoists and~~ how are they calculated? Installation permit fees are based on the total cost of the conveyance and the labor to install the conveyance. The following permit fees apply to the ~~construction or~~ relocation of all conveyances and material lifts:

TOTAL COST OF CONVEYANCE	FEE
$0 to and including $1,000	$50.00
$1,001 to and including $5,000	75.00
$5,001 to and including $7,000	125.00
$7,001 to and including $10,000	150.00
$10,001 to and including $15,000	200.00
OVER $15,000	280.00 plus
Each additional $1,000 or fraction thereof	7.00

AMENDATORY SECTION (Amending WSR 02-12-022, filed 5/28/02, effective 6/28/02)

WAC 296-96-01027 Are initial installation permit fees refundable? Your initial installation permit fees are refundable if the installation work has not been performed minus a processing fee unless your permits have expired. No refunds will be issued for expired permits. All requests for refunds must be submitted in writing to the elevator section and must identify the specific permits and the reasons for which the refunds are requested.

The processing fee for ((~~a~~)) each refund is $30.00

AMENDATORY SECTION (Amending WSR 02-12-022, filed 5/28/02, effective 6/28/02)

WAC 296-96-01035 Are there inspection fees? Yes. The initial inspection of a conveyance or for the initial inspection of construction, alteration or relocation of a conveyance is included with your permit fee. Once the department has approved the initial installation of the conveyance you will be issued a temporary operating permit that is valid for 30 days. Prior to the expiration of the 30-day permit the application for an annual operating permit and the appropriate fees must be paid to the department. Once the department has received the appropriate fees and application you will be issued your first annual operating permit. You are required to renew your annual operating permit yearly.

The following ((~~exceptions do~~)) inspections require ((~~a~~)) an additional inspection fee:

(1) **Reinspection.** If a conveyance does not pass an initial inspection and an additional inspection is required, the fee for each reinspection of a conveyance is $100.00 per conveyance plus $50.00 per hour for each hour in addition to the first hour.

The department may waive reinspection fees.

(2) **Inspecting increases in the height (jumping) of personnel and material hoists.**

The fee for inspecting an increase in the height (jumping) of each personnel hoist or material hoist is $100.00 plus $50.00 per hour for each hour in addition to 2 hours. This fee is for inspections occurring during regular working hours.

(3) **Variance inspections.**

(a) The fee for an on-site variance inspection is $150.00 per conveyance plus $50.00 per hour for each hour in addition to 2 hours. This fee is for inspections occurring during regular working hours.

(b) The fee for a variance ((~~approval~~)) that does not require an on-site inspection is $50.00 per conveyance. The individual requesting the variance ((~~approval~~)) must provide the department with pictures, documentation, or other information necessary for the department to review the variance. The department may conduct an on-site variance inspection to verify the information provided or if it determines that an inspection is necessary. If an on-site variance inspection is performed, the fees in (a) of this subsection will apply.

(4) **"Red tag" ((~~inspection~~)) status fee.** The annual fee for ((~~performing an annual inspection to~~)) a conveyance((~~s that~~

~~are~~)) in "Red tag" status is $25.00.

Note: You must provide the department with written approval from the building official, indicating that the conveyance is not required for building occupancy, when you apply to have the conveyance placed in voluntary red tag status.

(5) **Decommission inspection.** The fee for performing a decommission inspection is $50.00. Once the decommission inspection has been performed and approved, the conveyance will no longer require annual inspections until such time that the conveyance is brought back into service. Prior to operating the conveyance, a new inspection and annual operating permit must be obtained.

(6) **Voluntary inspections by request.** The owner or potential purchaser of a building within the department's jurisdiction may request a voluntary inspection of a conveyance. The fee for this inspection will be $100.00 per conveyance and $50.00 per hour for each hour in addition to 2 hours plus the standard per diem and mileage allowance granted to department inspectors. The owner/potential purchaser requesting the voluntary inspection will not be subject to any penalties based on the inspector's findings.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-01070 ((~~Are there penalties?~~)) What are the civil (monetary) penalties for violating the conveyance permit and operation requirements of chapter 70.87 RCW and this chapter? (1) Any licensee, installer, owner or operator of a conveyance who violates a provision of chapter 70.87 RCW or ((~~these rules~~)) this chapter shall be subject to the following civil penalties:

(a)	Operation of a conveyance without a permit:	
	First violation	$150.00
	Second violation	300.00
	Each additional violation	500.00
(b)	Installation of a conveyance without a permit:	
	First violation	$150.00
	Second violation	300.00
	Each additional violation	500.00
(c)	Relocation of a conveyance without a permit:	
	First violation	$150.00

	Second violation	300.00
	Each additional violation	500.00
(d)	Alteration of a conveyance without a permit:	
	First violation	$150.00
	Second violation	300.00
	Each additional violation	500.00
(e)	(i) Operation of a conveyance for which the department has issued a red tag or has revoked or suspended an operating permit((~~:~~)) or operation of a decommissioned elevator	$500.00
	(ii) Removal of a red tag from a conveyance	$500.00
(f)	Failure to comply with a correction notice:	
	Within 90 days	$100.00
	Between 91 and 180 days	250.00
	Between 181 and 270 days	400.00
	Between 271 and 360 days	500.00
	Each 30 days after 360 days	500.00
	Note: Penalties cumulate	
(g)	Failure to submit official written notification that all corrections have been completed:	
	Within 90 days	$100.00
	Between 91 and 180 days	250.00
	Between 181 and 270 days	400.00
	Between 271 and 360 days	500.00
	Each 30 days after 360 days	500.00
	Note: Penalties cumulate	
(h)	Failure to notify the department of each accident to a person requiring the services of a physician or resulting in a disability exceeding one day may result in a $500 penalty per day. The conveyance must be removed from service until the department authorizes the operation of the conveyance. This may require an inspection and the applicable fees will be applied. Failure to remove the conveyance from service may result in an additional $500 penalty per day.	

(2) A violation as described in subsection (1)(a), (b), (c), and (d) of this section will be a "second" or "additional" violation only if it occurs within one year of the first violation.

(3) The department must ((~~use~~)) serve notice by certified mail to ((~~notify the~~)) an installer, licensee, owner, or operator ((~~of~~)) for a violation of chapter 70.87 RCW, or ((~~these rules~~)) this chapter.

NEW SECTION

WAC 296-96-01075 How does an owner or licensee receive a variance from the installation and alteration requirements of chapter 70.87 RCW and this chapter? Variances from the installation and alteration requirements of this chapter may be requested. The variance request shall be in writing on a form approved by the department accompanied with the required fee. The individual requesting the variance must provide the department with pictures, documentation, or other information necessary for the department to review the variance. The department may conduct an on-site variance inspection to verify the information provided or if it determines that an inspection is necessary. If an on-site variance inspection is performed, the fees in WAC 296-96-01035 will also apply.

NEW SECTION

WAC 296-96-02230 When must the department be notified for a new or altered inspection? (1) The person or firm installing, relocating, or altering a conveyance shall notify the department in writing, at least seven days before requesting any inspection of the work, and shall subject the new, moved, or altered portions of the conveyance to the acceptance tests.

(2) The department may grant exceptions to this notice requirement.

NEW SECTION

WAC 296-96-02232 What are the conditions for obtaining a temporary operating permit? (1) Hydraulic elevators with less than four stops may not be issued a temporary operating permit unless preapproved by the department. In order to obtain a permit:

(a) The elevator must pass load tests and safety circuit inspections.

(b) Temporary or permanent lights in the cab, machine room and at the landings must be provided.

(c) Machine rooms must be fully enclosed and have a lockable door.

(d) Hoistways must be fully enclosed.

(e) A single means of disconnecting the elevator must be provided and related equipment must be identified by the use of numbers or letters on the disconnect, the controller, the drive machine, the cross head, and the car operating panel.

(f) Elevator cab interiors must be completed. Temporary cabs may be used and walls must be covered with fire retardant materials.

(g) The key operation of Phase I must recall the elevator.

(h) A means of emergency communication with the elevator must be provided. If there is no permanent method of emergency communication an operator with communication equipment must be provided.

(2) The person operating the permitted conveyance under this section must be properly trained in operation and safety and:

(a) The operator must be on the elevator whenever it is in use. The operator may be one of your employees.

(b) He or she must be designated to be the sole operator of the elevator.

(c) The operator must be trained in the proper operation of the elevator, the proper procedure to handle an emergency and must know who to contact in the event of an emergency involving the operation of the elevator.

(d) The operator must carry a means of two-way communication on his/her person at all times. (This may be in the form of a cell-phone, walkie-talkie, etc., providing proper reception is obtainable at all times.)

NEW SECTION

WAC 296-96-02235 What are the requirements for temporary operating permits? (1) A thirty-day temporary operating permit is for transportation of construction personnel and materials only, not for the transportation by the general public.

(2) Temporary operating permits are valid for thirty days.

(3) You must contact the department for a reinspection to renew the permit.

(4) All elevators with expired temporary operating permits that have not passed a final inspection may not be operated.

(5) Renewal of a temporary operating permit is at the discretion of the department.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02240 Where is a shut-off valve required for hydraulic elevators? Two shut-off valves may be required.

(1) ASME requires that a shut-off valve be installed in the machine room.

(2) When the pit is lower than the machine a shut-off valve must be installed in the pit. A separate shut-off valve is not required in the pit for hydraulic elevators equipped with a safety/rupture valve that rotates no more than 180 degrees to stop the flow of hydraulic fluid and has a safety shut-off handle capable of being grasped.

EXCEPTION: Limited use/limited application (LULA), special purpose and residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02275 What are the requirements for Fireman's Service Phase I and Phase II recall? Devices for deactivating recall must be in the line of sight of the elevator; be secure from tampering; and must be accessible to fire, inspection, and elevator service personnel only. Owner-designated patient express and emergency hospital service elevators may have a manual control in the car for use by authorized patient care personnel. When activated, it shall preclude Phase I recall.

The illuminated visual signal in the car that indicates when Phase I Emergency Recall Operation is in effect must stay illuminated until the car is taken off Phase I operation.

Once the car returns to the designated landing on Phase I recall and the doors have reached their full open position, the buzzer must be silenced within ten seconds.

Groups of elevators containing four or more cars shall be provided with two, three-position key switches per group. For purposes of this section, a group shall be defined as all elevators serving the same portion of a building. Hall call buttons common to a group will remain in service unless both Phase I recall switches of a four car or larger group are placed in the recall mode or a fire alarm recall signal is initiated.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from ((~~the Phase I recall requirement~~)) this section.

NEW SECTION

WAC 296-96-02276 What are the requirements for sprinklers in hoistways and machine rooms? (1) The machine room sprinkler piping must terminate in the machine room. The sprinkler piping must not run through the machine room to other spaces.

(2) The hoistway must not be used to supply sprinkler runs to more than one floor.

(3) The pit will be considered as a floor level.

(4) Sprinkler heads at the top of the shaft must terminate in the shaft. The sprinkler must not run through the hoistway to other spaces. "Other spaces" includes the machine room.

(5) All risers and returns must be located outside of the hoistway and machine room.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02277 How does the department enforce ASME requirements for sprinklers, smoke detectors, and heat detectors in hoistways and machine rooms? ASME A17.((~~1-102.2 (c)3~~)) 2.8.2.3.2 states: "Means shall be provided to automatically disconnect the mainline power supply to the affected elevator upon or prior to the application of water((~~."~~)) from sprinklers located in the machine room or in the hoistway more than 600 mm (24 inches) above the pit floor. This means shall be independent of the elevator control and shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply." This section applies to both new and altered elevators when sprinklers have been installed in the elevator machine room and/or hoistway.

(1) The department enforces this rule as follows:

(a) When sprinkler systems are installed in an elevator hoistway, fixed temperature heat detectors, set only at 135☜F, must be located at the top of the hoistway. If sprinklers are installed in the machine room, the same rule applies to heat detectors in the machine room. If ((~~you install~~)) heat detectors are installed, ((~~you must also install a~~)) smoke detectors must also be installed for elevator recall. The purpose of ((~~these~~)) the heat detector((~~s~~)) is to automatically disconnect mainline power to the elevator before water flows from any sprinkler associated with the elevator system.

(b) ((~~Smoke detectors at the top of the hoistway shall not recall the elevator to the bottom landing.~~)) Activation of a smoke detector or other initiating device at the top of the hoistway shall cause all elevators having any equipment in that hoistway, and any associated elevators of a group automatic operation, to be returned nonstop to the designated level.

(c) Heat detectors must be:

(i) Located ((~~near~~)) within 18 inches of each sprinkler head, as required by the local building official, or as required by NFPA 13((~~;~~)).

(ii) ((~~Considered only as an auxiliary function of elevator equipment;~~

~~(iii) Identified as "elevator controls only - DO NOT TEST";~~ ~~and~~

~~(iv)~~)) Ceiling mounted. However, pit detectors, if installed, may only be used as a signaling device and wall-

mounted if they are so designed.

((~~(v)~~)) (iii) Heat detectors are not required in pits provided the automatic sprinkler heads are installed in such a way that the water spray pattern does not spray higher than three feet above the pit floor with a spray pattern directed level and down. The shunt trip disconnect must be installed in the machine room or machinery space and it must be easily identifiable.

(d) The shunt trip disconnect must be installed in the machine room or machinery space and it must be easily identifiable.

(e) Power for the automatic disconnect control circuit must be derived from ((~~the load side of the elevator power main disconnecting means or from~~)) a 120 volt separate branch circuit. Circuit location must be identified on or next to the elevator disconnects. ((~~If a 120 volt separate branch circuit is used~~)) An illuminated visual device must be installed in the machine room adjacent to each elevator's disconnect. The purpose of this visual device is to indicate that power is available to the shunt trip activation mechanism.

((~~(e)~~)) (f) All electrical equipment and wiring associated with shunt trip devices must conform to the applicable ANSI/NFPA 70.

((~~(f)~~)) (g) The department does not require sprinkler shut-off valves. However, where they are installed, they must be located in an accessible place outside the hoistway, machine room or machinery space with their handles placed at no more than 6 feet above the floor.

((~~(g)~~)) (h) Emergency return units must be disabled when the shunt trip is activated.

(2) ((~~The department must approve~~)) Alternative methods used to achieve ASME A17.((~~1 - 102.2 (e)(3)~~)) 2.8.2.3.2 must be approved by the department prior to installation.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02278 Are keys required to be on-site? Yes. The keys to the machine room and the keys that are necessary to operate the elevator must be ((~~readily available to authorized personnel.~~

~~NOTE: The department recommends the use of a locked key retainer box in the elevator lobby at the designated level above the hall buttons or by machine room doors at no more than 6 feet above the floor. This key retainer box should be:~~

~~• Readily accessible to authorized personnel;~~

~~- Clearly labeled "Elevator"; and~~
~~- Equipped with a 1-inch cylinder cam lock key #39504.~~

~~The department further recommends that:~~)) located in a locked key retainer box in the elevator lobby at the designated level above the hall buttons; or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage through locked doors. The key retainer box must be:

- Readily accessible to authorized personnel;
- Clearly labeled "elevator";
- Securely mounted; and
- Equipped with a 1-inch cylinder cam lock key #39504 and securely mounted.

Further:

- Keys for access to elevator machine rooms and for operating elevator equipment ((~~are~~)) must be tagged and kept in the key box.
- The key box must contain((~~s~~)) all keys necessary for inspection of the elevator.
- Mechanical hoistway access devices ((~~are~~)) must be located in the key box or machine room.

EXCEPTION: Residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02280 Can pipes and ducts be installed above a machine room? Electric conduit, pipes, and ducts may be installed in the upper space ("upper space" is defined as the space above the fire-rated ceiling) of the elevator machine room as long as they are installed above the required seven-foot clearance and they do not interfere with the elevator equipment which also must be installed to allow a seven-foot head clearance.

(1) Straight through runs of electrical conduit without junction boxes may be installed in this space.

(2) Pipes and ducts conveying gases, vapor, or liquids may be installed in the space above the machine room provided they are encased in a noncombustible secondary pipe without joints, or a moisture barrier without penetration.

EXCEPTION: Residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02281 What is required for emergency escape hatches? Emergency escape hatches must be hinged and secured from the car top so that the cover opens from the top of the car only. The hatch must be able to be opened without the use of tools.

NEW SECTION

WAC 296-96-02282 What is required for fire fighters' service? It is the owner's responsibility to test fire fighters' service operation of Phase I and Phase II key switches quarterly. A log with dates and the initials of the person performing the test must be posted in the machine room.
EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02283 What is the minimum working space required in machine rooms? (1) In machine rooms with equipment requiring maintenance and inspection, an eighteen-inch working space must be established.

(2) There must be a minimum of eighteen inches working space (other than the required controller panel clearances) on either side of the hydraulic tank.

(3) The requirements in subsections (1) and (2) of this section do not supersede NFPA 70.

(4) The side with the hydraulic outlet pipe is not considered usable working space.

NEW SECTION

WAC 296-96-02285 Are there exceptions for correction facility elevators? Facilities that require special consideration to ensure the safety of security personnel and to prevent escapes must meet the relevant requirements of ASME A17.1, except that accessible "in-car" stop switches and signaling devices are not required when the elevator operation is:

(1) Continually monitored by audio-visual equipment; and

(2) Remotely controlled from a single location.

(3) Controls necessary for an elevator's operation may be located inside a car when the operating panel has a locked cover.

NEW SECTION

WAC 296-96-02290 What are the requirements for underground hydraulic elevator pipes, fittings, and cylinders? All newly installed underground pressure cylinders and pipes containing hydraulic elevator fluids shall be encased in an outer plastic containment.

(1) The plastic casing shall be constructed of polyethylene or polyvinyl chloride (PVC). The plastic pipe wall thickness must not be less than 0.125 inches (3.175 mm). The casing shall be capped at the bottom and all joints must be solvent or heat welded.

(2) The casing shall be sealed and dry around hydraulic pipe and cylinder to contain any leakage into the ground and to prevent electrolysis to the hydraulic pipe and the cylinder. Dry sand may be used to stabilize the hydraulic cylinder.

(3) A one-half inch pipe nipple with a one-way check valve shall be located between the casing and cylinder for monitoring purposes.

(4) Alternate methods must receive approval from the department prior to installation.

(5) This rule shall apply to all conveyances with installation permits issued by the department on or after the effective date of these rules.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02310 What is the minimum acceptable initial transfer time for an elevator door? "Initial transfer time" refers to the period of time between an elevator car receiving a call for service and when the car door begins to close. The minimum acceptable initial transfer time for an elevator is:

(1) For HALL CALLS, minimum acceptable initial transfer time is based upon the distance between a point in the center of the corridor or lobby (maximum 5 feet) that is directly opposite the farthest hall button controlling the car and the centerline of the hoist-way entrance. Minimum acceptable times for specific distances are:

(a) 0-5 feet: 4 seconds;

(b) 10 feet: 7 seconds;

(c) 15 feet: 10 seconds; and

(d) 20 feet: 13 seconds.

(2) For CAR CALLS, the minimum acceptable initial transfer time for doors to remain fully open is 3 seconds.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02315 What are the ((~~structural~~)) minimum cab size and other applicable requirements for car interiors? (1) All car interiors must be constructed to allow wheelchair users to enter the car, to maneuver within reach of the control panel and to exit the car.

(2) Minimum door width must be 36 inches.

(3) Minimum cab depth:

(a) From the rear wall to the return panel must be 51 inches; and

(b) From the rear wall to the inside face of the cab door must be 54 inches.

(4) For cabs with side-opening doors, the minimum cab width is 68 inches;

(5) For cabs with center-opening doors, the minimum cab width is 80 inches; ((~~and~~))

(6) Maximum clearance between a car platform sill and the edge of a hoistway landing sill must be 1 1/4 inch; and

(7) If the building official having jurisdiction determines the elevator must comply with accessibility requirements, the elevator must comply with subsections (1) through (6) of this section.

EXCEPTION 1: Elevators located in existing school buildings or other buildings specifically identified by local authorities may have a minimum clear distance between walls or between a wall and the door, including the return panel, of 54 inches, and a minimum distance from the wall to the return panel of 51 inches.

EXCEPTION 2: LULA, special purpose, and residential elevators must meet the specifications in ASME A17.1 pertaining to car size.

NEW SECTION

WAC 296-96-02317 When does the department require a local building official to sign off for the installation of LULAs, stair lifts, inclined wheelchair lifts and vertical wheelchair lifts? In existing buildings where LULAs, stair lifts, inclined wheelchair lifts and vertical wheelchair lifts are to be installed, the local building official must signify that he/she is allowing this type of conveyance on a form provided by the department.

NEW SECTION

WAC 296-96-02318 What are the general requirements for LULA elevators? (1) LULAs may be permitted in churches, private clubs, and buildings listed on the historical register that are not required to comply with accessibility requirements.

(2) Installation of LULAs in existing buildings that are not required to comply with accessibility requirements, will be considered on a case-by-case basis by the department.

(3) For LULAs installed according to subsections (1) and (2) of this section a form provided by the department must be signed by the local building official.

(4) LULAs must be equipped with an emergency communication device meeting the requirements of WAC 296-96-02330.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02320 What is required for car controls? (1) The following requirements apply to the location of car controls:

(a) Upon entering an elevator, at least one set of controls must be readily accessible from a wheelchair;

(b) The centerline of the alarm button and emergency stop switch must be 35 inches;

(c) Where a side approach is used, the highest floor buttons must be no higher than 54 inches from the floor;

(d) Where a forward approach is used, the highest floor buttons must be no higher than 48 inches from the floor;

(e) Emergency controls must be grouped together at the bottom of the control panel and centered at 35 inches; and

(f) Controls unessential to the elevator's operation may be located in a convenient place.

(2) The following requirements apply to the construction of control panels:

(a) Raised or flush floor registration buttons, exclusive of the panel border, must be at least 3/4 inch and arranged from left to right in ascending order.

(b) When pushed, the depth of flush buttons must not exceed 3/8 inch.

(c) Indicator lights must be installed to show each call registered and they must extinguish when a call is answered.

(d) All markings must be located to the left of and adjacent to the car controls on a contrasting color background.

(e) All letters or numbers must be at least 5/8 inches high and must be raised .030 of an inch.

(f) Braille must be used to identify all control buttons. Permanently attached plates are acceptable.

(g) Standard ASME A17.1 symbols must be used to identify essential controls.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02325 What are the location and operation requirements for car position indicators in the car? (1) A visual car position indicator must be located either above the car control panel or above the car door.

(2) As ((~~a~~)) the car passes or stops at a floor, the corresponding floor numbers must light up and a signal must sound.

(3) All numerals must be at least 1/2 inch high.

(4) All audible signals must be at least 20 decibels with a frequency no higher than 1500 Hz.

(5) The automatic announcement of a floor number may be substituted for an audible signal.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02330 What is required for installation and operation of emergency communication systems? Every elevator must contain an emergency two-way communication system ((~~connecting the elevator with a point outside the hoistway~~)). The installation and operation of this emergency communication system must comply with the ASME A17.1 code in effect when the department issued the elevator's installation permit. In addition to the appropriate ASME A17.1 code, the following department requirements apply:

(1) The communication device located in the elevator car must comply with the following:

(a) The maximum height of any operable part of the communication system is 48 inches above the floor.

((~~(2)~~)) (b) Raised symbols and letters must identify the communication system. These symbols and letters must be located adjacent to the communication device. The characters used must be:

((~~(a)~~)) (i) At least 5/8 inches but no more than 2 inches high;

((~~(b)~~)) (ii) Raised 1/32 inch;

((~~(c)~~)) (iii) Upper case;

((~~(d)~~)) (iv) Sans serif or simple serif type; and

((~~(e)~~)) (v) Accompanied by Grade 2 Braille.

((~~(3)~~)) (c) If the system is located in a closed compartment, opening the door to the compartment must:

((~~(a)~~)) (i) Require the use of only one hand without tight grasping, pinching, or twisting of the wrist; and

((~~(b)~~)) (ii) Require a maximum force of 5 pounds.

((~~(4)~~)) (d) The emergency communication system must not be based solely upon voice communication since voice-only systems are inaccessible to people with speech or hearing impairments. An indicator light must be visible when the telephone is activated. This nonverbal means must enable the message recipient to determine the elevator's location address and, when more than one elevator is installed, the elevator's number.

((~~(5)~~)) (e) The emergency communication system must use a line that is capable of communicating with and signaling to a person or service that can respond appropriately to the emergency at all times.

(2) A communication device must be installed in the lobby adjacent to the Phase I key switch. This device must be a two-way communication device used to communicate with individuals in the elevator.

(a) The height of any communication device(s) located in the lobby must be located between 48-60 inches above the floor.

(b) Additional communication device(s) may also be located in other parts of the building in addition to the one located in the lobby.

(c) Exception: Elevators that have less than sixty feet of travel do not require an intercom.

(3) Subsections (1) and (2) of this section do not apply to special purpose elevators. However, residential, and special purpose elevators must have a means of communication located inside the elevator cab. This communication device must be available at all times.

EXCEPTION: Residential inclined elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02340 What requirements apply to the size and location of car handrails? (1) A handrail must be installed on all car walls not used for normal exits. The hand rails must be:

((~~(1)~~)) (a) Attached to the wall at a height of between 32

and 35 inches from the floor.

((~~(2)~~)) (b) Attached to the wall with a 1 1/2 inch space between the wall and the rail;

((~~(3)~~)) (c) Constructed with the hand grip portion ((~~at least~~)) not less than 1 1/4 inches but not more than 2 inches wide;

((~~(4)~~)) (d) Constructed with a cross-section shape that is substantially oval or round;

((~~(5)~~)) (e) Constructed with smooth surfaces and no sharp corners.

Approaching handrail ends on a blank wall in the interior corners of a car do not have to return to the wall. However, if the handrail is located on the closing door wall of a single-slide or two-speed entrance elevator and it projects an abrupt end towards people entering the car, the handrail end must return to the wall.

(2) Residential elevators must have at least one handrail. The handrail must be installed on a car wall not used for normal exits.

EXCEPTION: Special purpose elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02350 What requirements apply to floor designations on elevator door jambs? Floor designations must be:

(1) Located on both sides of the doorjamb at each hoist-way entrance;

(2) Visible from within the car and from the lobby;

(3) Positioned on a centerline height of 60 inches above the floor;

(4) Two inches high and raised 3/10 inch;

(5) Placed on a contrasting color background; and

(6) Accompanied by Grade 2 Braille. Permanently attached plates are acceptable.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-02360 What are the requirements for installation and operation of hall lanterns? (1) A visual and audible signal must be installed at each hoistway entrance. These signals must indicate, to the prospective passenger, which car is responding to the call and the direction the car is traveling.

(2) The visual signal for each direction must be at least 2 1/2 inches in size and must be visible from the vicinity of the hall call button.

(3) The audible signal must sound once for "up" and twice for "down."

(4) The centerline of the lantern fixture must be located at least 6 feet above the floor.

(5) ((~~Hall~~)) Car lanterns may be located either on the jamb or in the car.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02361 What are the requirements for electrical main line disconnects? (1) The main line disconnect switch(es) or circuit breaker must be located inside the machine room door on the lock jamb side of the machine room door and not more than twenty-four inches from the jamb to the operating handle; and it must be at a height of not more than sixty-six inches above the finish floor.

(2) For multicar machine rooms the switches shall be grouped together as close as possible to that location.

(3) For machine rooms with double swing doors, the doors must swing out and the switch(es) must be on the wall adjacent to the hinge side of the active door panel.

(4) The switch(es) must be designed so that they may be locked out and tagged in the open position.

EXCEPTION: Special purpose and residential inclined elevators are exempt from this section.

NEW SECTION

WAC 296-96-02362 What are the requirements associated with elevator machine rooms? (1) Panels or doors for the purpose of accessing nonelevator equipment are not permitted in elevator machine rooms. Passage through the machine room may not be used to gain access to other parts of the building that do not contain elevator equipment.

(2) The lighting control switch must be located inside the machine room within twenty-four inches of the lock jamb side of the machine room door.

(3) Cooling or venting of the elevator machine room:

(a) When solid state equipment is used to operate the elevators, the elevator machine room must be provided with an independent ventilation or air conditioning system to prevent overheating of the electrical equipment.

(b) The operating temperature shall be established by the elevator equipment manufacturer's specifications. Where no specifications are available, the machine room temperature shall be maintained at no less than fifty-five degrees Fahrenheit and no more than one hundred degrees Fahrenheit.

(c) When standby power is connected to the elevators, the machine room ventilation or air conditioning system shall be connected to the standby power.

(i) All cooling and heating systems must be independent.

(ii) If air conditioners are used, they must service the elevator machine room only. If the air conditioner is mounted overhead, seven feet of headroom clearance must be provided from the underside of the unit to the machine room floor.

(iii) If air exchange is used, it must not draw air from or exhaust air into other parts of the building.

(d) Machine rooms located in underground parking garages must have a means to exchange the air in the machine room. An "exchange of air" is completed through separate intake and exhaust systems.

EXCEPTION: The air in an underground parking garage machine room can be exchanged directly into the parking garage area.

(4) All elevators that are provided with remote elevator machine and/or control rooms must be provided with a permanent means of communication between the elevator car and the remote machine room and/or control room.

(5) Elevator machine room doors must have signs with lettering at least two inches in height with "elevator equipment room authorized personnel only - no storage."

EXCEPTION: Residential conveyances, LULAs and special purpose elevators are exempted from these requirements.

NEW SECTION

WAC 296-96-02363 What are the requirements for fire doors installed in front of hoistway doors? If fire and/or smoke doors are required to be installed by the International Building Code or the local building official they must not:

(1) Be permanently attached to the hoistway door assembly.

(2) Encroach upon the full width and height of the hoistway door opening.

NEW SECTION

WAC 296-96-02364 What are the requirements for accessing elevated elevator pit equipment? Where elevated pit equipment requires assisted vertical access of more than five feet, a permanent noncombustible working platform shall be provided. Access to the platform must be by a fixed ladder or stair conforming to ANSI A14.3. The platform shall be of sufficient strength to support personnel and may be of open grillwork.

In residential installations where the pit depth exceeds three feet, a fixed vertical ladder, designed to the current adopted rules for commercial installations, must be provided.

NEW SECTION

WAC 296-96-02366 What are the requirements for submersible pumps or sumps? Sump pumps and drains are not required in elevator pits. Sump holes must be installed and measure a minimum of 18" x 18" x 18". If drains or sump pumps are installed they must not be directly connected to sewers and/or storm drains. P-traps and check valves are not allowed. All installations must meet the NEC and all plumbing codes.

Sump hole covers must be designed to withstand a load of three hundred pounds per square foot.

NEW SECTION

WAC 296-96-02367 What are the requirements for top of car lighting for freight and passenger elevators? A permanently wired work light and outlet shall be installed on the top of freight and passenger elevators. The light(s) shall provide illumination of 10-foot candles across the entire horizontal plane of the top of the car up to a height of six feet. The fixture(s) shall be protected from accidental breakage.

NEW SECTION

WAC 296-96-02370 What is required for physically handicapped lifts? (1) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in buildings where the conveyance is not visible at all times must be equipped with a standard electric switch Chicago style lock and #2252 key.

(2) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in residences licensed as group homes must be equipped with a standard electric key switch Chicago style lock and #2252 key.

(3) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in schools, day care centers, churches and other facilities which typically accommodate or provide services for children must also be equipped with a standard electric key switch Chicago style lock and #2252 key.

(4) Where these conveyances are installed outdoors, they must be equipped with either a standard electric key switch Chicago style lock and #2252 key or a timing device. The timing device must not allow the conveyance to run outside of normal business hours.

(5) In locations where the conveyance is not visible at all times, the conveyance must be equipped with a means of two-way communication that is capable of communicating with and signaling to a person or service that can respond appropriately at all times.

EXEMPTION: Inclined stairway chairlifts and inclined and vertical wheelchair lifts in private residences are not required to be equipped with key switches.

(6) Beginning July 1, 2004, vertical wheelchair lifts in commercial installations must be equipped with low energy power-

operated doors or gates complying with ANSI/BHMA A156.19. Doors and gates shall remain open for twenty seconds minimum. End doors shall be thirty-two inches minimum clear width. Side doors shall be forty-two inches minimum clear width.

EXCEPTION: Lifts having doors or gates on opposite sides shall be permitted to have manual doors and gates.

(7) For purposes of this section, "not visible at all times" includes, but is not limited to, conveyances located in stairwells, auditoriums, and other areas which are not generally in the normal path of travel during the hours that the building is occupied.

NEW SECTION

WAC 296-96-02371 Are private residence inclined stairway chairlifts required to be permanently wired? No. Private residence inclined stairway chairlifts are not required to be permanently wired into a structure. These conveyances may be equipped with a cord and plug. The plug must be directly inserted into a wall receptacle that is protected by a fuse or a circuit breaker at its source and is capable of supporting the additional load on the circuit. The source must be identified either at the receptacle or at the feeder panel. The cord must be secured in a manner that will not create any tripping hazards.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05010 What are the department's rules on material lifts? (1) These rules define a "material lift" as a fixed stationary conveyance that:

(a) Has a car or platform moving in guides;

(b) Serves two or more floors of a building or structure;

(c) Has a vertical rise of at least 5 feet and no more than 60 feet;

(d) Has a maximum speed of 50 feet per minute;

(e) Is not part of a conveying system but is an isolated self-contained lift;

(f) Travels only in an inclined or vertical direction;

(g) Is operated or supervised by an individual designated by the employer;

(h) Is installed in a commercial or industrial area not

accessible to the general public; and

(i) May not be operated from within the car.

(2) ((~~Material lift installation and operation must comply with chapter 296-155 WAC (Safety standards for construction work).~~

~~(3)~~)) Material lifts must not carry people so their operation or failure will not endanger people working near them. WAC 296-96-05010 through 296-96-05290 establishes requirements for the construction, installation, and operation of material lifts. These rules allow certain conveyances designed solely to transport material and equipment to be constructed to less stringent and costly standards than ASME A17.1.

These rules do not apply to conveyances that lack a car (platform) and use rollers, belts, tracks, power conveyors, or similar carrying (loading) surfaces. (See ASME/ANSI B20.1.)

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05030 What are the construction requirements for hoistway enclosure gates and doors? Enclosure gates (doors) must be constructed according to the following standards:

(1) The gate must guard the full width of each opening on every landing.

(2) It must be built in one of the following styles:

(a) Vertically sliding;

(b) Biparting;

(c) Counter-balanced;

(d) Horizontally swinging; or

(e) Horizontally sliding.

(3) Be constructed of either solid material or material with openings that will reject a 2-inch diameter ball.

(4) Be constructed with a distance of not more than 2 1/2 inches between a hoistway gate or hoistway door face and a landing sill edge.

(5) Be designed and guided to withstand (without being broken, permanently deformed, or displaced from its guides or tracks) a 100 pound lateral pressure applied near its center.

(6) ((~~Employ a combination mechanical lock and electrical contact~~)) Be equipped with labeled and listed electrical interlock(s) that prevents the operation of the lift when the doors or gates are open.

(7) ((~~Construct~~)) Be constructed with balanced type vertically sliding gates that extend no more than 2 inches vertically from the landing threshold and no less than 66 inches

above it.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05070 What car enclosure requirements apply to lifts? Lift cars must have their sides enclosed with solid panels or openwork that will reject a 2-inch diameter ball. On the car sides where there is no gate (door), the enclosure must extend to a height of at least 48 inches from the floor or to a height necessary to enclose the materials that are being moved. On the car side next to the counterweight runway, the enclosure must extend vertically to the car top or underside of the car crosshead and horizontally to at least 6 inches on each side of the runway. Material lifts in unenclosed hoistways must have a car gate that is constructed of the same material as the car enclosure. The gate must be the same height as the sidewalls of the car enclosure and must be provided with a latching device.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05160 What types of ropes, chains, and rope connections must be used on a lift? (1) The following general requirements apply:

(a) Iron (low carbon steel) or steel wire ropes with fiber cores must be used to suspend cars and counterweights.

(b) The minimum safety factor for suspension ropes must be 6 times the manufacturers rated breaking strength per rope.

(c) The car, the counterweight end of the car and the counterweight wire ropes (or the stationary hitch ends where multiple roping is used) must be fastened so that the looped ends of the turned back portion in the rope sockets are clearly visible. Fastenings must either be:

(i) Individual tapered, babbitted rope sockets; or

(ii) Other types of department approved rope fastenings.

(d) Rope sockets must develop at least 80 percent of the breaking strength of the strongest rope used in the sockets.

(e) U-bolt rope clips (clamps) cannot be used for load fastenings.

(f) A metal or plastic data tag must be securely attached to one of the wire rope fastenings each time the ropes are

replaced or reshackled. The data tag must include:

(i) The diameter of the ropes in inches; and

(ii) The manufacturer's rated breaking strength.

(iii) All replacements of wire rope or chain must be in accordance with the lift manufacturer's specifications.

(2) The following requirements apply to specific types of material lifts:

(a) Traction type lifts must use at least three hoisting ropes.

(b) ((~~Owners, operators and installers of~~)) Lifts suspended by hoisting chains must comply with the chain manufacturer's specifications for maintenance, inspection, and application.

(c) Lifts using roller chain type lifting chains must use chains with a six to one safety factor based on ASME/ANSI B-29.1M minimum (not average) chain strength.

(d) Drum type lifts, must use either at least two hoisting ropes or a secondary as well as a primary load path to the hoist must be employed. Also, the cable secured to the drum must be at least one and one-half turns around the drum when the carrier is at its extreme limit of travel.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05170 What requirements apply to lift control stations? Lift control stations must be located at each landing out of reach but within sight of the ((~~lift~~)) car. They must have controls that are permanently and clearly labeled by function. The controls must have a stop switch that will halt electrical power to the driving machine and brake. This stop switch must:

(1) Be manually operated;

(2) Have red operating handles or buttons;

(3) Be conspicuously and permanently marked "STOP"; and

(4) Clearly indicate the stop and run position.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05230 What safety regulations apply to exposed equipment? All exposed gears, sprockets, sheaves, drums, ropes and chains must be guarded to protect against accidental contact as required ((~~by chapter 296-24 WAC (~~))General safety and health standards((~~)~~)) adopted according to chapter 49.17 RCW.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05290 Under what conditions is a five-year test administered? A five-year test of the material lift car and counterweight safety devices must be conducted, and the test must be administered under the following conditions:

(1) Qualified people will conduct the test. A qualified person is either:

(a) An elevator mechanic licensed in the appropriate category for the conveyance being tested;

(b) The representative of a firm that ((~~manufactures, installs or services material lifts or a person approved by the department~~)) manufactured the particular material lift, and who holds a current temporary mechanic's license in this state;

(c) The representative of a firm that manufactured the particular material lift who is working under the direct supervision of an elevator mechanic licensed in the appropriate category for the conveyance being tested.

(2) The car safety devices must be tested while the car is carrying a 100 percent rated load and the counterweight is at no load.

(3) A report of the test results must be submitted to the department for approval.

PART C2 - CONSTRUCTION, OPERATION, MAINTENANCE AND INSPECTION OF INCLINED PRIVATE RESIDENCE ((~~CONVEYANCE~~)) ELEVATOR FOR TRANSPORTING PERSON(S) FOR RESIDENTIAL USE

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07010 What is the scope of ((~~these regulations~~)) Part C-2? The rules in this part are the minimum standard for all new ((~~and altered~~)) inclined private residence elevators for single family use. The purpose of this part is to provide for the safety of all persons riding in or operating an inclined private residence elevator to ensure that no person in proximity of the elevator will be endangered by its operation or failure.

NEW SECTION

WAC 296-96-07021 What are the requirements for existing inclined private residence elevators? Inclined private residence elevators must comply with the rules adopted by the department that were in effect at the time the elevator was permitted, regardless of whether the rule(s) has been repealed, unless any new rule specifically states that it applies to all conveyances, regardless of when the conveyance was permitted. Copies of previous rules adopted by the department are available upon request.

If the department determines that an inclined private residence elevator was installed without a permit and/or without an inspection the conveyance will be required to comply with the current rules adopted by the department unless you are able to provide documentation determining the date the conveyance was installed (e.g., sales receipts, building permits, or other appropriate documentation).

NEW SECTION

WAC 296-96-07024 What rules apply to alterations of inclined private residence elevators? If the inclined private residence elevator is altered only the component(s) that was altered must comply with the applicable rules adopted by the department in effect at the time the conveyance was altered. If the department determines that an elevator was altered without a permit and inspection, the conveyance will be required to comply with the applicable rules adopted by the department at the time the noncompliant alteration was identified.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07080 What are the load and size requirements for car platforms? ((~~(1) The rated load of a platform must not exceed 700 pounds.~~

~~(2) The inside net platform area must not exceed 12 square feet. EXCEPTION: The net platform area may be increased by no more than 3 square feet provided that shelves or benches permanently affixed to the car structure reduce the standing area to 12 square feet.~~)) The minimum rated load shall be not less than the following:

(1) For net platform areas up to and including twelve square feet, the rated load shall be not less than forty pounds per square foot or three hundred fifty pounds whichever is greater.

(2) For net platform areas greater than twelve square feet, the rated load shall be based upon sixty-two and one-half pounds per square foot.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07100 What construction requirements apply to ((~~incline~~)) inclined private residence elevators? (1) ((~~Incline~~)) All of the components associated with inclined private residence elevators must be built to a minimum safety factor of five, unless otherwise specified in this part.

(2) Inclined private residence elevator car frames and platforms must:

(a) Be built of metal, a combination of metal and wood or other materials of equal strength;

(b) ((~~Have a safety factor of at least five; and~~

~~(c)~~)) Be suitably prepared and/or protected for exposure to weather.

((~~(2)~~)) (3) Incline car chassis must:

(a) Be built of metal, except for the guiding members, and

(b) ((~~Have a safety factor of at least 5, based upon the car's rated load.~~

~~(c)~~)) Chassis guiding members must be retained and/or enclosed in guides so that the chassis cannot be derailed.

((~~(3)~~)) (4) Cast iron may not be used in the construction of a car frame or chassis.

((~~(4)~~)) (5) A car may have only one compartment.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07170 What are the requirements of safeties and governors? (1) All inclined private residence elevators must be equipped with a safety capable of stopping and sustaining a car carrying its rated load.

(a) Elevator safeties must be type "A" or "B" or other devices approved by the department and must be operated by a speed governor.

(b) Elevator safeties must operate independently of governor speed action and without delay when a hoist rope breaks.

(2) ((~~Speed~~)) Governors ((~~must~~)) shall operate ((~~with~~)) to set the safety ((~~set~~)) at a maximum ((~~speed~~)) of 140 percent of rated speed ((~~and~~)). Upon slackening of the hoist ropes the

safety shall set without appreciable delay and independently of the speed governor. The governor shall be located where:

(a) If over-travel occurs, ((~~they~~)) the governor will not be struck by the car or counterweight;

(b) All parts can freely and fully move; ((~~and~~))

(c) ((~~They are~~)) The governor is accessible for a complete examination;

(d) Governors are required to be of the mechanical type; and

(e) Belt driven governors must be monitored. In the case of belt breakage or disengagement, the car must be shut down.

(3) If ropes are used, ((~~they~~)) the ropes must be made of iron, steel, Monel metal or phosphor bronze and be at least 1/4 inch in diameter. Tiller rope construction must not be used.

(4) Motor-control circuits and brake-control circuits must be opened either before the safety applies or at the time ((~~it~~)) the safety applies.

(5) All safeties must apply mechanically. Electrically operated safeties must not be used.

(6) All winding drum type ((~~incline~~)) inclined elevators that use rope suspensions must be equipped with a manually reset slack-rope device. During a car's descent, if ((~~it~~)) the travel of the car is obstructed and the hoisting ropes go slack, the slack-rope device must stop power to the elevator motor and brake

(7) Cast iron must not be used to build any elevator safety part that stops and sustains the elevator.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07180 What are the construction requirements for driving machines and sheaves? (1)(a) Winding drums, traction sheaves, overhead sheaves and deflecting sheaves must:

((~~(a)~~)) (i) Be made of cast iron or steel;

((~~(b)~~)) (ii) Have diameters at least 30 times the diameter of the wire hoisting ropes; and

((~~(c)~~)) (iii) Have machined rope grooves.

(b) EXCEPTION:

((~~(1)~~)) (i) If 8 x 19 steel ropes are used, drum and sheave diameters may be reduced to 21 times the diameter of the hoisting rope.

((~~(2)~~)) (ii) Existing incline lifts suspended by cables are not required to have machine grooves, except for the first row of cables wrapped on the drum and shall be required to have a

tracking device.

((~~(3)~~)) (iii) On existing inclined lifts suspended by cables that do not have machine grooves on the drum, the first layer of ropes will be recognized as providing the same traction as grooves, provided that this layer remains on the drum at all times and is not allowed to wind out. Such lifts must be provided with a tracking device to ensure that the rope does not wind over itself on the drum.

(2) The factor of safety, based on the static load (the rated load plus the weight of the car, ropes, counterweights, etc.) to be used in the design of driving machines and sheaves, must be at least:

(a) Eight for driving machines and sheaves built of wrought iron and steel; or

(b) Ten for driving machines built of cast iron, cast steel or other materials.

((~~(4)~~)) (3) Set screw type fastenings must not be substituted for keys or pins if connections are subject to torque or tension.

((~~(5)~~)) (4) Gears:

(a) When connecting drums or sheaves to the main driving gear, friction gears, clutch mechanisms or couplings must not be used.

(b) Worm gears having cast iron teeth must not be used.

((~~(6)~~)) (5) Brakes:

(a) Electric brakes must be of the friction type set by springs and must release electrically.

(b) All brakes must be able to stop and hold a elevator carrying 125 percent of its rated load.

(c) At least one brake must be mounted ((~~on the load side of the driving machine's worm shaft. On indirectly driven elevators, brakes must engage when the driving machine fails.~~)) so that in the case of gearbox failure, the drum will hold the rated load.

(d) If a single ground or short-circuit, a counter-voltage or a motor field discharge occurs and the operating device is set in the stop position, the brake magnet must set the brake.

((~~(7)~~)) (6) Driving machines:

(a) A driving machine may be mounted on a elevator chassis or in a remote location. However, if mounted in a remote location, all sheaves and sprockets must be guarded and positioned so the hoisting ropes and chains remain properly aligned while the elevator is in use.

(b) Screw type machines must not be used.

(c) Hydraulic driving machines must conform to ASME A17.1.

(d) Roped-hydraulic machines may be used.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07190 What construction requirements apply to terminal stopping switches? A hoistway must be equipped with normal upper and lower terminal stopping switches that are activated by a elevator chassis. ((~~These~~)) Normal upper and lower terminal stopping switches must stop the elevator at the normal top and bottom terminals of travel.

(1) A hoistway must be equipped with final terminal stopping switches that are activated by a elevator chassis. These switches must stop the elevator ((~~from traveling~~)) if the elevator travels beyond the normal terminals and prevent ((~~it~~)) the elevator from moving in ((~~both~~)) either direction((~~s~~)).

(2) Winding drum machines may use a slack cable switch instead of a bottom final terminal switch.

(3) Normal and final terminal stopping switches must not control the same switches on the controller unless at least two separate and independent switches are used. At least two of these separate switches must be closed in order to complete the motor and brake circuits for each direction of travel.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07200 What are the requirements for operation of an inclined private residence elevator? ((~~(1) An inclined private residence elevator must be operated by constant pressure or momentary pressure key switches located at each operating station and on the elevator:~~

~~(a) The key or code must be entered each time to move the elevator.~~

~~(b) Key-operated switches must be of the spring return type and must be operated by a weatherproof cylinder type lock having not less than five pin or five disc combination with the key removable only when the switch is in the off position.~~

~~(c) On existing installations with key/button operations, the key must be activated each time to energize the operation.~~

~~(2) Emergency stop switches must be provided on or adjacent to the operating station. Stop switches must:~~

~~(a) Be of a manually opened and manually closed type;~~

~~(b) Have red handles or buttons and be conspicuously marked "STOP;"~~

~~(c) Open even if springs fail when springs are used.~~

~~(3) Design and installation of control and operating circuits must meet the following:~~

~~(a) Control systems based upon the completion or maintenance of an electric circuit must not be used for interrupting power and applying machine brakes at terminals; stopping elevators when an emergency stop switch is open or when any electrical protective device operates; stopping a machine when the safety applies.~~

~~(b) If springs are used to activate switches, contact, or circuit breaking relays to stop the elevator at a terminal, the springs must be a restrained compression type.~~

~~(4) Hand rope operation must not be used.~~)) (1) If the activation of the elevator is by key switch or key pad it must conform to the requirements of (a) and (b) of this subsection. The department may approve alternative methods of equal security such as key card or magnetic swipe card. Methods must conform to the following:

(a) The key or code must be entered each time to move the elevator.

(b) Key-operated switches must be of the spring return type and must be operated by a weatherproof cylinder type lock having not less than five pin or five disc combination with the key removable only when the switch is in the off position.

(2) If activation of the elevator is provided by a timing circuit that only allows the circuits to be initiated or unlocked for a sufficient amount of time to allow passengers to board the elevator and begin transit, a separate activation switch on the car is not required. The operating circuits must automatically relock:

(a) If the elevator is not activated within its preset period of time;

(b) When any landing stop button is activated;

(c) When the preset timing period has expired and the car has completed transit to another landing or returns to the departure landing.

(3) Emergency stop switches must be provided on or adjacent to the operating station.

(a) Stop switches in the car must:

(i) Be of a manually opened and manually closed type;

(ii) Have red handles or buttons and be conspicuously marked "STOP";

(iii) Open even if springs fail when springs are used.

(b) Stop switch at other operating stations:

(i) May be of a momentary type;

(ii) Must have red handles or buttons and be conspicuously marked "stop";

(iii) Must open even if springs fail when springs are used;

(iv) After initiation of stopping, the car may not automatically restart. Run condition must be manually initiated.

(4) Design and installation of control and operating circuits must meet the following:

(a) Control systems based upon the completion or maintenance of an electric circuit must not be used for interrupting power and applying machine brakes at terminals; stopping elevators when an emergency stop switch is open or when any electrical protective device operates; stopping a machine when the safety applies.

(b) If springs are used to activate switches, contact, or circuit breaking relays to stop the elevator at a terminal, the springs must be of the restrained compression type.

(5) Hand rope operation must not be used.

(6) Radio controls may be used in lieu of wiring for all car controls provided:

(a) The system is set up so that it is fail safe (if contact is lost, the unit will stop);

(b) In such installations, the stop button in the car shall interrupt the circuit of frequency; and

(c) The controls are permanently mounted and conform to code.

NEW SECTION

WAC 296-96-07215 What are the requirements for controllers? All controllers must be labeled and listed. In addition, controller covers must be locked.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07230 What requirements apply to electrical wiring? (1) All wiring must conform to the National Electrical Code (NEC) in effect at the time of installation or major alteration.

(2) If a driving machine is mounted on the elevator chassis, the electrical connections between the elevator and the power source must be able to stop power if a traveling cable parts.

(3) All electrical connections between the elevator and the stationary connections must be insulated flexible conductors conforming to the applicable articles in the NEC ((~~Article 620,~~)) relating to Elevators, Dumbwaiters, Escalators, Moving Walks, Wheelchair Lifts, and Stairway Chair Lifts.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07250 What additional requirements apply to inclined private residence elevators? (1) All inclined private residence elevators must be equipped with:

(a) A ((~~hand crank capable~~)) Manual method of moving the elevator in accordance with ASME A17.1; and

(b) A machine brake with a lever to release the brake allowing use of the ((~~hand crank~~)) manual method.

(2) Machinery spaces must be protected from weather and accidental contact. Machinery spaces must be locked.

(3) Guiding members and moving parts of the inclined private residence elevator must be free of brush and other types of material that might either impede the travel or cause deterioration of the equipment over time.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08010 What is the scope of ((~~these regulations~~)) Part C-3? The rules in this section are the minimum standard for all new((~~, altered,~~)) and existing inclined private residence ((~~elevators~~)) conveyances for transporting property for single family use in a private residence. The purpose of this section is to ensure that inclined private residence ((~~elevators~~)) conveyances will be used only for transporting materials and goods, not people, and that no person in proximity of the ((~~elevator~~)) conveyance will be endangered by its operation or failure.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08020 What is the definition for inclined private residence ((~~elevator~~)) conveyances for transporting property? "Inclined private residence ((~~elevator~~)) conveyances for transporting property" means a device constructed and operated for transporting property from one elevation to another at an angle of inclination of 70 degrees or less from the horizontal. Essentially, it is a car or platform traveling on guides or guiding members in an inclined plane.

NEW SECTION

WAC 296-96-08022 What are the requirements for existing inclined private residence conveyances for transporting property? Inclined private residence conveyances for transporting property must comply with the rules adopted by the department that were in effect at the time the conveyance was permitted, regardless of whether the rule(s) has been repealed, unless any new rule specifically states that it applies to all conveyances, regardless of when the conveyance was permitted. Copies of previous rules adopted by the department are available upon request.

If the department determines that an inclined private residence conveyance for transporting property was installed without a permit and inspection the conveyance will be required to comply with the current rules adopted by the department unless you are able to provide documentation determining the date the conveyance was installed (e.g., sales receipts, building permits, or other appropriate documentation).

NEW SECTION

WAC 296-96-08024 What rules apply to alterations of inclined private residence conveyances for transporting property? If the inclined private residence conveyance for transporting property is altered only the component(s) that was altered must comply with the applicable rules adopted by the department in effect at the time the conveyance was altered.

If the department determines that a conveyance was altered without a permit and inspection, the conveyance will be required to comply with the applicable rules adopted by the department at the time the noncompliant alteration was identified.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08030 Does the department approve elevators plans and specifications for inclined private residence conveyances for transporting property? Yes. (1) Before commencing construction of any inclined private residence elevator for transporting property the owner must submit complete plans and specifications to the department for approval.

(2) Plans and specifications covering the installation of an inclined private residence ((~~elevator~~)) conveyance for transporting property must be endorsed by a professional engineer before the department will approve the plans.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08050 What are the construction requirements for inclined private residence ((~~elevator~~)) conveyances for transporting property for cars, landing gates, and enclosures? (1) Any landing enclosure must have a railing at least 42 inches high to protect all landing platforms and those areas of a building used as landing platforms.

(2) Where gates are not provided at the entrance to the

platform, a chain with a sign must be provided to block the landing entrance. The sign must state "Keep off landing until elevator has stopped at platform."

(3) If gates are provided, they must be:

(a) Either ((~~be~~)) a horizontally sliding type or a swing type; and

(b) Equipped with a latch that holds the gate closed and an electrical contact to prevent movement of the elevator when a gate is open.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08060 What types of bumpers and buffers must be installed on inclined private residence ((~~elevators~~)) conveyances for transporting property? Solid bumpers or spring type buffers may be used. (1) Solid bumpers must:

(a) Be built of wood or other suitable resilient material;

(b) Have the ability to resist deterioration from weather; and

(c) Have sufficient strength to withstand, without failure, the impact of a descending ((~~elevator~~)) conveyance carrying its rated load or counterweight and traveling at 115 percent of its rated speed.

(2) Spring type buffers, if used, must:

(a) Be built with a minimum stroke of 3/4 inch and with a maximum stroke of 1 1/2 inches; and

(b) Not fully compress when struck by the ((~~elevator~~)) conveyance carrying its rated load or counterweight and traveling at 115 percent of its rated speed.

(3) Inclined private residence ((~~elevators~~)) conveyances for transporting property are not required to have bumpers and buffers except when obstructions are encountered.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08090 What is the maximum rated speed of an ((~~incline elevator~~)) inclined conveyance? The maximum rated speed of an ((~~incline elevator~~)) inclined conveyance, measured along the incline, is 75 feet per minute.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08100 What requirements apply to ((~~incline elevators~~)) inclined conveyance? (1) ((~~Incline~~)) Inclined conveyance elevator frames and platforms must:

(a) Be built of metal, a combination of metal and wood or other materials of equal strength;

(b) Have a safety factor of at least 5; and

(c) Be suitably prepared and/or protected ((~~for~~)) from exposure to weather.

(2) ((~~Incline elevator~~)) Inclined conveyance chassis must:

(a) Be built of metal, except for the guiding members;

(b) Have a safety factor of at least 5, based upon the ((~~elevator's~~)) conveyance's rated load; and

(c) Have the chassis guiding members retained and/or enclosed in guides so that the chassis cannot be derailed.

(3) Cast iron may not be used in the construction of the ((~~elevator~~)) conveyance frame or chassis.

(4) A car may have only one compartment.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08110 What requirements apply to car enclosures? (1) Car enclosures are not required; however, if provided, the car enclosure must be:

(a) Securely fastened to the car platform so that it cannot become loose or displaced due to ordinary service, application of the ((~~elevator~~)) conveyance safety, or from the ((~~elevator~~)) conveyance coming into contact with the buffer.

(b) Built to withstand a 75 pound pressure, horizontally applied at any point on the wall, without causing a wall deflection that reduces running clearance below 3/4 inch or above 1 inch.

(2) If glass or plastic is used in the car enclosure, it must be weather resistant plastic or tempered safety glass.

(3) Where there is no car enclosure, a means must be provided to secure all materials to the platform.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08140 Are capacity and data plates required on inclined private residence ((~~elevator~~)) conveyances for transporting property? (1) The manufacturer must install a weather resistant capacity plate. It must be securely fastened to the ((~~elevator~~)) conveyance in a conspicuous place and state the ((~~elevator's~~)) conveyance's rated load in pounds using letters at least 1/4 inch high.

(2) The manufacturer must install a metal data plate showing the ((~~elevator's~~)) conveyance's weight, speed, suspension means data, manufacturer's name and date of installation. The data plate must be securely fastened in a conspicuous place in the machine area.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08150 What are the requirements for guide rails, track supports and fastenings? (1) Guides, guide rails, guide rail brackets, splice plates, and fastenings must be made of steel or other metals conforming to the requirements of this section.

(2) Guides, guide rails, guide rail brackets, and their fastenings and supports must, at the point of support, deflect 1/8 inch or less while resisting horizontal forces encountered during loading. When horizontal force is measured at a midpoint between brackets, guide rails must deflect 1/4 inch or less in any direction.

(3) The top and bottom of each guide or guide rail run must not allow the ((~~elevator~~)) conveyance and counterweight guiding members to travel beyond the guide rail ends.

(4) Guides for inclined private residence ((~~elevators~~)) conveyances must have no more stresses and deflection than allowed by the manufacturer's specifications.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08160 What requirements apply to counterweights? (1) Counterweights, where used, must be in a guide or track.

(2) Counterweights must not be of sufficient weight to cause undue slackening of any ((~~elevator~~)) conveyance hoisting rope or chain during acceleration or retardation of the ((~~elevator~~)) conveyance. Counterweight weight section must be mounted in structural or formed metal frames which are designed to retain weights securely in place.

exception: Counterweights may be constructed of a single metal plate.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08170 What are the requirements of safeties and governors? (1) All inclined private residence ((~~elevators~~)) conveyances for transporting property must have a slack cable safety device capable of stopping and sustaining a car carrying its rated load.

(2) Other types of approved safety devices may be used. If so, such devices must meet the requirements of WAC 296-96-07170.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08175 How and when are ((~~elevator~~)) conveyance safeties tested? The ((~~elevator safety~~)) safeties must be tested before the inclined private residence ((~~elevators~~)) conveyances for transporting property is put into service. ((~~It~~)) Safeties must be tested while the ((~~elevator~~)) conveyance is carrying its rated load.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08180 What are the requirements for driving machines and sheaves? (1) All new winding drums, traction sheaves, overhead sheaves and deflecting sheaves must:

(a) Be made of cast iron or steel;

(b) Have diameters at least 30 times the diameter of the wire hoisting ropes. EXCEPTION: If 8 x 19 steel ropes are used, drum and sheave diameters may be reduced to 21 times the diameter of the hoisting rope; and

(c) Have machined rope grooves.

(2) The factor of safety, based on the static load (the rated load plus the weight of the car, ropes, counterweights, etc.) to be used in the design of driving machines and sheaves, must be at least 5.

(3) Set screw type fastenings must not be substituted for keys or pins if connections are subject to torque or tension.

(4) Gears:

(a) When connecting drums or sheaves to the main driving gear, friction gears, clutch mechanisms or couplings must not be used.

(b) Worm gears having cast iron teeth must not be used.

(5) Brakes:

(a) Electric brakes must be of the friction type set by springs and must release electrically.

(b) All brakes must be able to stop and hold a car carrying 125 percent of its rated load.

(c) At least one brake must be mounted on the load side of the driving machine's worm shaft. On indirectly driven lifts, brakes must engage when the driving machine fails.

(d) If a single ground or short-circuit, a counter-voltage or a motor field discharge occurs and the operating device is set in the stop position, the brake magnet must set the brake.

(6) Driving machines:

(a) A driving machine may be mounted on a ((~~elevator~~)) conveyance chassis or in a remote location. However, if mounted in a remote location, all sheaves and sprockets must be guarded and positioned so the hoisting ropes and chains remain properly aligned while the ((~~elevator~~)) conveyance is in use.

(b) Screw type machines must not be used.

(c) Hydraulic driving machines must conform to ASME A17.1.

(d) Roped-hydraulic machines may be used.

(e) Rack and pinion drive may be used.

EXCEPTION: Existing inclined private residence ((~~elevators~~)) conveyances for transporting property may use wrapped cable drums as long as they do not show signs of excessive wear.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08190 What requirements apply to terminal stopping switches? A hoistway must be equipped with normal upper and lower terminal stopping switches that are activated by the ((~~elevator~~)) conveyance chassis. These switches must stop the ((~~elevator~~)) conveyance at the normal top and bottom terminals of travel.

(1) Winding drum machines may use a slack cable switch as a bottom final terminal switch.

(2) Normal and final terminal stopping switches must not control the same switches on the controller unless at least two separate and independent switches are used. At least two of these separate switches must be closed in order to complete the motor and brake circuits for each direction of travel.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08200 What are the requirements for the activation and operation of an inclined private residence ((~~elevators~~)) conveyances for transporting property? ((~~(1) An inclined private residence elevator for transporting property must be operated by constant pressure or momentary pressure key switches located at each operating station/landing:~~

~~(a) The key or code must be entered each time to move the elevator.~~

~~(b) Key-operated switches must be of the spring return type and must be operated by a weatherproof cylinder type lock having not less than five pin or five disc combination with the key removable only when the switch is in the off position.~~

~~(c) On existing installations with key/button operations, the key must be activated each time to energize the operation.~~

~~(2) Emergency stop switches must be provided on or adjacent to the operating station. Stop switches must:~~

~~(a) Be of a manually opened and manually closed type;~~

~~(b) Have red handles or buttons and be conspicuously marked~~

~~"STOP;"~~

~~(c) Open even if springs fail when springs are used.~~

~~(3) Design and installation of control and operating circuits must meet the following:~~

~~(a) Control systems based upon the completion or maintenance of an electric circuit must not be used for interrupting power and applying machine brakes at terminals, stopping elevators when an emergency stop switch is open or when any electrical protective device operates, or for stopping a machine when the safety applies.~~

~~(b) If springs are used to activate switches, contact, or circuit breaking relays to stop the elevator at a terminal, the springs must be a restrained compression type.~~

~~(4) Hand rope operation must not be used.~~)) (1) If activation of the conveyance is by key switch, key pad or swipe card, the activation and operation must conform to the requirements of (a) and (b) of this subsection. The department may approve alternative methods of equal security.

(a) The key or code must be entered each time to move the conveyance.

(b) Key-operated switches must be of the spring return type and must be operated by a weatherproof cylinder type lock having not less than five pin or five disc combination with the key removable only when the switch is in the off position.

(2) If activation is provided by a timing circuit that only permits the circuits to be initiated or unlocked for a sufficient amount of time to allow the loading of materials, the operating circuits must automatically relock:

(a) If the conveyance is not activated within its preset period of time;

(b) When any landing stop button is activated; or

(c) When the car has completed transit to another landing or returns to the departure landing.

(3) Emergency stop switches must be provided on or adjacent to the operating station. Stop switches:

(a) May be of a momentary type;

(b) Must have red handles or buttons and be conspicuously marked "STOP"; and

(c) Must open even if springs fail when springs are used.

(4) After initiation of stopping, the car may not automatically restart. Run condition must be manually initiated.

(5) Design and installation of control and operating circuits must meet the following:

(a) Control systems based upon the completion or maintenance of an electric circuit must not be used for interrupting power and applying machine brakes at terminals, stopping elevators when an emergency stop switch is open or when any electrical protective device operates, or for stopping a

machine when the safety applies.

(b) If springs are used to activate switches, contact, or circuit breaking relays to stop the elevator at a terminal, the springs must be a restrained compression type.

(6) Hand rope operation must not be used.

(7) Radio controls may be used in lieu of wiring for all car controls provided:

(a) The system is set up so that it is fail safe (if radio contact is lost, the unit will stop);

(b) In such installations, the stop button in the car shall interrupt the circuit of frequency; and

(c) The controls are permanently mounted and comply with the applicable rules.

NEW SECTION

WAC 296-96-08215 What are the requirements for controllers? All controllers must be labeled and listed. In addition, controller covers must be locked.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08220 What are the requirements for traveling cables? (1) All traveling cables must conform to the ((~~National Electrical Code (~~))NEC((~~)~~)) in effect at the time of installation or major alteration.

(2) Where circuits through the traveling cable(s) exceed 30 volts, a means must be provided to stop the power automatically if the traveling cables part.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08230 What requirements apply to electrical wiring? (1) All wiring must conform to the ((~~National Electrical Code (~~))NEC((~~)~~)) in effect at the time of installation or major alteration.

(2) If a driving machine is mounted on the ((~~elevator~~))

conveyance chassis, the electrical connections between the ((~~elevator~~)) conveyance and the power source must be able to stop power if a traveling cable parts.

(3) All electrical connections between the ((~~elevator~~)) conveyance chassis and the stationary connections must be insulated flexible conductors conforming to the applicable articles of the NEC ((~~Article 620,~~)) relating to Elevators, Dumbwaiters, Escalators, Moving Walks, Wheelchair Lifts, and Stairway Chair Lifts.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08250 What additional requirements apply to inclined private residence ((~~elevators~~)) conveyances for transporting property? (1) All inclined private residence ((~~elevators~~)) conveyances for transporting property must be equipped with:

(a) A ((~~hand crank~~)) manual method capable of moving the ((~~elevator~~)) conveyance in accordance with ASME A17.1; and

(b) A machine brake with a lever to release the brake allowing use of the ((~~hand crank~~)) manual method.

(2) Machinery spaces must be protected from weather and accidental contact. Machinery space must be locked.

(3) Metal signs stating "NO RIDERS" in two-inch letters must be conspicuously posted and permanently attached to the ((~~elevator~~)) conveyance and at each landing.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-09002 ((~~Can~~)) May a drop plate be used for temporary hoists? Drop plates for temporary hoists may be allowed provided that they are permanently attached to the elevator and the elevator may not operate unless the drop plate is retracted.

NEW SECTION

WAC 296-96-09003 What are the requirements for landing gates? Landing gates must be provided with electrical gate switches.

NEW SECTION

WAC 296-96-09004 Do jumps (increased travel) have to be inspected? Yes. Personnel hoists that have been increased in height (jumped) must be inspected before being allowed to run to the new landings.

NEW SECTION

WAC 296-96-10002 Do jumps (increased travel) have to be inspected? Yes. Material hoists that have been increased in height (jumped) must be inspected before being allowed to run to the new landings.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-11001 What regulations apply to belt manlifts ((~~prior to 1974~~))?

((~~BELT MANLIFT CODE~~			
~~TITLE~~	~~DATE INSTALLED~~		~~COMMENTS~~
	~~FROM~~	~~TO~~	
~~Existing Belt Manlifts~~	~~1962~~	~~1974~~	~~Used as existing standard for belt manlifts installed in years effective.~~))

WAC 296-96-11010 through 296-96-11078 applies to all existing

belt manlifts. After the effective date of these rules all belt manlifts must be installed according to Belt Manlifts USAS A90.1-1997.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-11016 What ((~~structural~~)) general requirements apply to belt manlift landings? (1) Vertical clearance between the floor or mounting platform and the lower edge of the conical guard above it must be at least 7 feet, 6 inches. When this clearance is not possible, access to the manlift must be prohibited and the space where the runway passes through the platform floor must be enclosed.

(2) Floor space adjacent to floor openings must be kept clear and free of obstructions at all times.

(3) Adequate lighting (not less than ((~~3~~)) 5 foot-candle power) must be provided at each floor landing whenever the lift is in use.

(4) The landing surfaces at all entrances and exits must provide safe footing and must have a coefficient of friction of at least 0.5 to help insure safe footing.

(5) Emergency landings must be provided so that the maximum distance a person must travel on the emergency ladder between an emergency landing and a floor landing is 25 feet. Emergency landings must:

(a) Be accessible from both runs of the lift;

(b) Give access to the emergency ladder; and

(c) Be completely enclosed with a standard railing and toeboard.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-11019 What ((~~structural~~)) requirements apply to the guards and cones of belt manlift landings? (1) On the ascending side of the lift, all landings must have a beveled guard or cone that meets the following requirements:

(a) Where possible, a cone must make an angle with the horizontal of at least 45 degrees. A cone angle of 60 degrees or more must be used where ceiling heights permit.

(b) Where possible, ((~~a~~)) the guard or cone must extend at

least 42 inches outward from any belt handhold. A guard or cone must not extend beyond the upper surface of the floor above.

(c) A cone must be built of sheet steel (at least No. 18 U.S. gauge) or any material of equivalent strength or stiffness. The lower edge of a cone must be rolled to a minimum diameter of 1/2 inch. The interior of a cone must be smooth with no protruding rivets, bolts or screws.

(2) All obstructions must be guarded just like floor openings with the same minimum distances observed.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-11022 What requirements apply to guarding lift entrances and exits? (1) All manlift floor or landing entrances and exits must be guarded by either a maze (staggered railing) or a handrail equipped with self-closing gates.

(2) When a maze is used:

(a) Maze or staggered openings must not allow direct passage between a platform enclosure and the outer floor space;

(b) Rails must be located between 2 and 4 feet from the edge of the opening as measured at right angles to the face of the belt; and

(c) At openings, the intersection of the top rail and the end post must form a bend or standard long sweep "ell."

(3) When a handrail is used:

(a) Rails must be standard guardrails with rounded corners, toeboards and meet the guard rail requirements ((~~located in chapter 296-24 WAC, General safety and health standards~~)) adopted according to chapter 49.17 RCW; and

(b) Gates must have rounded corners, open outward, and be self-closing.

(4) Unless prevented by building design, all entrances and exits at all landings must be in the same relative location.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-11045 What drive machine requirements apply to belt manlifts? (1) Belt manlifts must be driven either by directly connected machines or by multiple "V" belts.

(2) Cast iron gears must not be used.

(3) Brakes:

(a) On direct connected machines, the brake must be mechanically applied to the motor shaft and released electronically.

(b) On "V" belt driven machines, the brake must be mechanically applied to the input shaft and released electronically.

(c) All brakes must be capable of stopping and holding the lift while carrying its rated capacity.

(4) Belts:

(a) Belts may not have more than one splice per belt.

(b) There shall not be more than one inch of space between the opposing ends of the belt.

(c) A belt manlift that has evidence of severe belt damage must be removed from service immediately. Belts with severe belt damage may not be repaired and/or returned to service. "Severe belt damage" means that the protective outer cover of a belt becomes cut, cracked or separated exposing damaged inner fabric, and such damage extends across the full width of the belt, spans between adjacent bolt holes, or damage goes through the entire thickness of the inner fabric. A torn belt is also considered severe.

Exception: A lap splice that has become cracked or damaged may be converted to a butt splice and returned to service, provided that the damaged area on the splice is completely removed.

(d) The conversion of a lap splice to a butt splice does not constitute a repair.

(e) A belt that has evidence of superficial belt cover damage while in use on a manlift is not required to be replaced. "Superficial belt cover damage" means that the protective outer cover of a belt becomes scratched, cut or cracked exposing the inner fabric. Such damage may not be continuous across the full width of the belt.

(5) Belts fastening:

(a) Belts must be fastened either by a ((~~lapped~~)) lap splice or a butt splice with a strap on the belt side opposite the pulley.

(b) For lapped splices on manlifts with travel distances not exceeding 100 feet, the overlap of the belt at the splice must be at least 3 feet; or

(c) For lapped splices exceeding 100 feet, the overlap at the splice must be at least 4 feet.

(d) For butt splices on manlifts with travel distances not exceeding 100 feet, the strap must extend at least 3 feet on one side of the butt; or

(e) For butt splices not exceeding 100 feet, the strap must extend at least 4 feet on one side of the butt.

(f) For 12-inch belts, the joint must be fastened with a

minimum of 20 special elevator bolts with minimum diameters of 1/4 inch. To effectively cover the belt joint area, these bolts must be arranged symmetrically in 5 rows.

(g) For a 14-inch belt, the minimum number of bolts is 23.

(h) For a 16-inch belt, the minimum number of bolts is 27.

((~~(5)~~)) (6) All installations must use machines designed and constructed to hold the driving pulley when there is shaft failure or overspeed.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-11057 What requirements apply to "up-limit stops"? (1) Two separate automatic stop devices must be provided to cut off the power and apply the brake when a loaded step passes the upper terminal landing. One of these devices must consist of a switch mechanically operated by the belt or stop roller. The second device must consist of any of the following:

(a) A roller switch located above but not in line with the first switch;

(b) A photocell and light source (an "electric eye"); or

(c) A switch activated by a lever, bar, rod or plate.

((~~(~~)) (i) If a plate is used, it should be positioned above the head pulley so it barely clears a passing step.((~~)~~))

(ii) If a bar is used, the bar must be of the "breakaway" type.

(2) The stop device must stop the lift before a loaded step reaches a point 24 inches above the top terminal landing.

(3) Once the lift has stopped, the automatic stop device must be manually reset. Therefore, this device must be located on the top landing where the reset person has a clear view of both the "up" and "down" runs of the lift; and it must be impossible to reset from a step.

(4) Electric stop devices must meet the following requirements:

(a) All electric switches that directly open the main motor circuit must be multiple type switches;

(b) Photoelectric devices must be designed and installed so that failure of the light source, the light sensitive element or any vacuum tube used in the circuit will result in shutting off power to the driving motor;

(c) In areas where flammable vapors or dust may be present, all electrical installations must be in accordance with the NEC requirements for those installations; and

(d) All controller contacts carrying main motor current must be copper to carbon types unless the circuit is simultaneously broken at two or more points or the contacts are immersed in oil.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-11078 What is required for belt manlift inspections? (1) All manlifts must be inspected by a qualified person, designated by the lift's owner, at least once every 30 days.

(2) The inspection must cover (but is not limited to) the following items:

- Belt and belt tension
- Bottom (boot) and pulley
- Brake
- Clearance
- Drive pulley
- Driving mechanism
- Electrical switches
- Guardrails
- Handholds and fastenings
- Lubrication
- Motor
- Pulley supports
- Rails, rail supports and fastenings
- Rollers and slides
- Signal equipment
- Steps and fastenings
- Warning signs and lights

(3) A written record must be kept of results of each inspection, and it must be made available to all inspectors. This information must be recorded under the monthly portion of the test log required by Appendix A of ASME A90.1-1997.

(4) For purposes of this section "adequate lighting" means five-foot candles.

NEW SECTION

WAC 296-96-11080 Under what conditions is a five-year test administered? A five-year test of the belt manlift must be conducted, and the test must be administered under the following conditions:

(1) Qualified people will conduct the test. A qualified person is either:

(a) An elevator mechanic licensed in the appropriate category of the conveyance being tested;

(b) The representative of a firm that manufactured the particular belt manlift who holds a current temporary mechanic's license in this state; or

(c) The representative of a firm that manufactured the particular belt manlift who is working under the direct supervision of an elevator mechanic licensed in the appropriate category of the conveyance being tested.

(2)(a) The up capacity of the belt manlift must be tested with two hundred pounds on each horizontal step. During the up-run portion of the test the belt manlift must not show appreciable slip of the belt when standing or running at rated speed.

(b) The down capacity of the belt manlift must be tested with two hundred pounds on each horizontal step. During the down-run portion of the test the belt manlift must not show appreciable slip of the belt when standing or running at the rated speed.

The brake shall stop and hold the belt with test load within a maximum of twenty-four inches of travel.

(3) After the five-year test has been performed a tag indicating the date of the test and name of the company performing the test must be attached in a visible area of the drive motor machine.

ELECTRIC MANLIFTS

NEW SECTION

WAC 296-96-13135 What are the requirements for electric manlifts? WAC 296-96-13135 through 296-96-13171 are the minimum requirements for all existing electric manlifts.

NEW SECTION

WAC 296-96-13139 What structural requirements apply to hoistway enclosures and landings? (1) A hoistway must be fully enclosed, or enclosed on all landings to a height of six feet above the landing floor or six feet above the highest working level or stair level adjacent to the hoistway.

(2) Perforated enclosures can be used where fire resistance is not required. However, such an enclosure must use at least No. 13 U.S. gauge steel wire, if a steel wire grill or expanded metal grill type, and it must have openings that reject a one-inch diameter ball.

(3) All landings must be properly and adequately lighted.

(4) For purposes of this section "adequate lighting" means five-foot candles.

NEW SECTION

WAC 296-96-13143 What structural requirements apply to hoistway gates and doors? (1) Gates may be constructed of wood slat, steel wire grill, expanded metal or solid material provided that all openings reject a two-inch diameter ball and resist a two hundred fifty pound horizontal thrust.

(a) Steel wire and expanded metal gates must be constructed of at least No. 13 U.S. gauge steel.

(b) Wood slat gates must have slats at least two inches wide and one-half inch thick, nominal size.

(c) Solid material gates must be constructed of at least one-eighth inch reinforced sheet steel or one-half inch plywood.

(2) Gates may be horizontal swinging, vertical or horizontal sliding or biparting types, and must:

(a) Span the full width of the elevator car;

(b) Extend from one inch above the landing floor to at least six feet above it;

(c) Not swing into the hoistway; and

(d) Be equipped with interlocks or mechanical locks and electric contacts that prevent the gate from opening when a car is away from a landing.

(3) Hoistway doors must be closed before the car can leave the landing. Once the car leaves the landing, the door must be latched so that it will not open when the elevator is not at the landing.

NEW SECTION

WAC 296-96-13145 What structural requirements apply to elevator cars? Elevator cars must be fully enclosed to the car height or to a height of at least six feet six inches, whichever is greater.

(1) If constructed of solid materials, cars must be capable of withstanding a horizontal thrust of seventy-five pounds while deflecting no more than one-quarter inch.

(2) If constructed of perforated materials, all openings must be capable of rejecting at least a one-inch diameter ball.

(3) Cars frames must be of substantial metal or wood construction.

(a) Metal frames must have a safety factor of four.

(b) Wood frames must have a safety factor of six.

(c) Wood frames must be constructed with gussets and bolts secured with large washers, lock washers and nuts.

(4) Cars must have platforms whose inside dimensions do not exceed thirty inches on each side (six and one-quarter square feet area).

(5) Cars must have substantial protective tops. These tops:

(a) May have hinged front halves;

(b) May be made of No. 9 U.S. wire-gauge screen, No. 11 gauge expanded metal, No. 14 gauge sheet steel, or one-quarter inch or heavier plywood.

(c) If made of wire screen or metal with openings, must reject a one-half inch diameter ball.

NEW SECTION

WAC 296-96-13147 What structural requirements apply to elevator doors? All elevators must have car doors, except on fully enclosed hoistways equipped with hoistway gates and enclosed from the top of the hoistway opening to the ceiling on the landing side.

(1) Car doors must be:

(a) Constructed of solid or perforated material which is capable of resisting a seventy-five pound thrust without deflecting one-quarter inch. If perforated material is used, it must reject a one-inch diameter ball.

(b) Biparting or otherwise horizontally swung provided the door swings within the elevator car.

(c) Equipped with a positive locking latch device that resists a two hundred fifty pound thrust.

(2) Interlocks or a combination consisting of mechanical locks and electric contacts must be provided for all elevators having car doors. An electrical/mechanical interlock must be provided on car gates on elevators in unenclosed hoistways unless a safe means of self-evacuation is provided. Such means must be approved by the department.

NEW SECTION

WAC 296-96-13149 What are the structural requirements for counterweights, counterweight enclosures, and counterweight fastenings? All counterweights must be fully enclosed at landings or at the path of travel.

(1) At the bottom of a counterweight enclosure, there must be an inspection opening large enough to allow the inspection of cable fastenings, counterweight and buffer.

(2) Rectangular shaped counterweights must be secured by at least two and one-half inch mild steel bolts with lock nuts.

(3) Round counterweights must be fastened with a center bolt at least three quarter inch in diameter and secured with a lock nut.

(4) All bolt eyes must be welded closed.

(5) Cable fastenings shall be by babbitted tapered elevator sockets or other acceptable methods. If cable clamps are used, a minimum of three cable clamps must be provided. U-shaped

clamps shall not be acceptable.

NEW SECTION

WAC 296-96-13151 What construction requirements apply to car guide rails? Each electric manlift must be equipped with at least two guide rails. Guide rails must:

(1) Extend at least six inches beyond the maximum travel distance of the car with the buffers compressed.

(2) Be securely fastened to a vertical support for the full length of the elevator's travel.

(3) Be constructed of vertical grain fir, angle iron:

(a) If constructed with vertical grain fir, the rails must be at least one and one-half inch by one and one-half inch and not vary in thickness by more than three-sixteenths inch on brake surfaces.

(b) If constructed with angle iron, the angle iron must be at least one-quarter inch by two inch by two inch.

(4) Be able to resist a two hundred fifty pound horizontal thrust.

(5) Be able to resist more than one-half inch total deflection when the car safety is applied.

NEW SECTION

WAC 296-96-13153 What construction requirements apply to hoisting ropes? There must be at least two hoisting ropes. Each rope must be:

(1) Made of a good grade of elevator traction wire rope;

(2) At least three-eighths inches in diameter and possessing a safety factor of five;

(3) Fastened by babbitted tapered elevator sockets or other acceptable methods. If cable clamps are used, a minimum of three cable clamps must be provided. U-shaped clamps shall not be acceptable.

(4) Long enough so the car platform will be no more than six inches above the top landing when the counterweight buffer is fully compressed, and at least six inches from the counterbalance sheave when the car buffer is fully compressed.

NEW SECTION

WAC 296-96-13155 What are the requirements for a hoistway space? There must not be habitable space below an elevator hoistway or counterweight shaft unless the floor above the space can withstand an impact one hundred twenty-five percent greater than the impact generated by a free falling car or counterweight falling from the full height of the hoistway.

NEW SECTION

WAC 296-96-13157 What requirements apply to car safeties? All cars suspended or operated from overhead machinery must be equipped with an approved car safety capable of stopping and holding the car while carrying its rated load.

(1) Car safeties must be mechanically operated and not be affected by any interruptions in the electrical circuit.

(2) Car safeties and governor controlled safeties must operate automatically and the control circuit must be broken in the event of cable breakage.

(3) A no-load annual safety test must be performed and a tag with the date and company conducting the test must be attached to the governor with a wire and seal. A safety tag must also be permanently affixed to the inside of the car.

(4) A five-year full load test must be performed and a safety tag with the date and company conducting the test must be permanently attached to the governor with a wire and seal. A safety tag must also be permanently affixed to the inside of the car. Documentation must be submitted to the department.

Qualified people will conduct the test. A qualified person is either:

(a) An elevator mechanic licensed in the appropriate category for the conveyance being tested;

(b) The representative of a firm that manufactured the particular material lift and who holds a current temporary mechanic's license in this state; or

(c) The representative of a firm that manufactured the particular material lift who is working under the direct supervision of an elevator mechanic licensed in the appropriate category for the conveyance being tested.

(5) Separate safety tags must be used to distinguish the

no-load annual safety test and the five-year full load test.

NEW SECTION

WAC 296-96-13159 What requirements apply to brakes? All elevators must be equipped with brakes that engage mechanically and release electrically.

(1) Brakes must be located on the final drive of all elevator machines.

(2) The brake activating circuit must be designed so that interruption of power by the slack cable switch, control switch, and limit switches activate the brake.

(3) The brakes must activate under short circuit, phase failure, or reverse phase conditions.

NEW SECTION

WAC 296-96-13161 What requirements apply to car controls and safety devices? (1) Car controls may be automatic push button, constant pressure push button or momentary push button types. **Hand rope and car switch controls must not be used.**

(2) If a car is not equipped with constant pressure push button controls, then it must be equipped with a manually operated emergency stop switch that is clearly marked "emergency stop."

(3) Terminal limiting devices must operate independently of car controls and must automatically stop the car at the top and bottom terminal landings.

(4) All winding drum machine type elevators must be equipped with top and bottom final limit switches.

(5) A manual-reset slack rope device that breaks the circuit to the drive motor and brake must be installed on all winding drum type machines.

(6) All electric manlifts lifts must be equipped with an overspeed governor that must not exceed one hundred seventy-five feet per minute and must deenergize the brake control and motor drive circuits simultaneously when the car safety mechanism is activated.

(7) Car speeds for electric lifts must not exceed one hundred twenty-five feet per minute.

(8) Elevator controls and disconnects must be accessible and marked.

NEW SECTION

WAC 296-96-13167 What requirements apply to elevator driving machines? (1) Elevator machines must be driven by approved-type units.

(a) On direct drive or approved worm gear driven type, a mechanically actuated, electrically released brake must be installed on the driving unit.

(b) On V belt driven types, a minimum of four belts, one-half inch minimum size, must be used to transmit power from the motor to the drive shaft and a mechanically activated, electrically released brake must be installed on the final drive shaft.

(2) Wherever practical, elevator machines must be installed on the top side of the supporting structure.

(3) All components of the driving mechanism and parts subject to stress involved in suspending the load or related equipment must be designed to withstand eight times the total weight to be suspended, including load, counterweight, car and cables.

(4) Gears must be made of steel or equivalent material. Cast iron gears are prohibited.

(5) A working platform, with railings complying with the applicable requirements adopted according to chapter 49.17 RCW, shall be provided to allow for safely working on equipment.

(6) A light with a switch must be located near the elevator driving machine or the machinery space.

(7) A means to lockout/tagout the elevator equipment must be located near the elevator driving machine or the machinery space.

(8) The elevator machinery shall be protected from the weather.

(9) All sheaves must be appropriately guarded per the requirements adopted according to chapter 49.17 RCW.

(10) Changes based on the requirement found in subsections (5) through (9) of this section must be completed within two years of the effective date of these rules.

NEW SECTION

WAC 296-96-13169 What requirements apply to car and counterweight buffers? (1) All elevator cars must be equipped with adequate car buffers.

(2) All elevators using counterweights must be equipped with adequate counterweight buffers.

NEW SECTION

WAC 296-96-13171 What other requirements apply to electric manlifts? (1) Adequate lighting must be provided at each landing and in the shaftway.

(2) A sign bearing the following information must be posted in a conspicuous place within the car:

(a) Total load limit in pounds;

(b) **"Maximum capacity-one person"**; and

(c) **"For authorized personnel use only."**

(3) A properly working fire extinguisher must be present in each car.

(4) For purposes of this section "adequate lighting" means five-foot candles.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-14045 What construction specifications apply to hoistway cars? (1) The car must be built to the following specifications:

(a) The car platform must be no greater than 30 inches on either side (6.25 square feet area).

(b) The car frame and platform must be of steel or sound seasoned wood construction and be designed with a safety factor of not less than 4 for metal and 6 for wood, based on a maximum capacity of 250 pounds.

(c) All frame members must be securely bolted, riveted or welded and braced. If bolted, lock washers or lock nuts must be used.

(d) Where wooden frame members are bolted, large washers or metal plates must be used to minimize the possibility of splitting or cracking the wood.

(2) The sides of the car must be enclosed by a minimum of 2 safety guard rails with the top rail not less than 36 inches nor more than 42 inches from the car floor. Rails must sustain a horizontal thrust of 250 pounds. If solid material is used, it must be smooth surfaced and not less than 1/2 inch thickness, if wood; not less than 16 gauge thickness, if steel; and must be constructed from the car floor to a height of not less than 3 feet.

(a) Where the hoistway is not enclosed on the entrance side of the car, a self-locking or drop bar gate must be provided. The car gate may be of the folding type, horizontally swung, provided it swings into the car enclosure. Drop bar gates must be of two bar construction, parallelogram type, and conform to requirements specified for car guard rails.

(b) The car gate must drop into locking slots or be provided with a positive locking type latch capable of withstanding 250 pounds horizontal thrust.

(3) Every car must have a substantial protective top. The front half may be hinged. The protective top may be made from No. 9 U.S. wire gauge screen, No. 11 gauge expanded metal, No. 14 gauge sheet steel, 3/4 inch or heavier plywood. If made of wire screen or metal, the openings must reject a 1/2 inch diameter ball.

(4) Every car must have a proper rack to hold the balance weights. Weights must be contained in the proper rack when the car is in motion.

(5) A sign bearing the following information must be conspicuously posted within the car:

(a) Total load limit in pounds;

(b) "Maximum capacity one person"; and

(c) "For authorized personnel use only."

(6) Every car must be equipped with a spring loaded foot brake which:

(a) Operates independently of the car safeties;

(b) Operates in both directions and will stop and hold the car and its load; and

(c) Locks the car in its position automatically whenever the operator releases the pressure on the foot pedal.

(7) Every car must be equipped with a car safety device which:

(a) Applies to the sides of the main guide rails; and

(b) Stops and holds the car and its load immediately when the hoisting rope breaks.

(8) Every car must have a minimum clearance of 6 feet 6 inches from the top of the car platform to the bottom edge of the crosshead or any other obstruction.

(9) A tool box with minimum dimensions of 4 inches long by 3 inches deep must be provided and firmly attached to the car structure.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-14060 What requirements apply to hoisting ropes? (1) Hoisting ropes must be of good grade traction elevator wire rope and must:

(a) Be not less than 3/8 inch in diameter((~~;~~)).

(b) Provide a safety factor of 5 based on the maximum weight supported((~~;~~)).

(c) Be of sufficient length to prevent the counterweight from striking the overhead structure when car is at the bottom, and prevent the car from striking the overhead before the counterweight is at its lower limit of travel((~~;~~)).

(d) ((~~Be fastened at each end by at least 3 or more clamps, with the "U" of the clamp bearing on the dead end of the rope; and~~)) Cable fastenings shall be by babbitted tapered elevator sockets or other acceptable methods approved by the department. If cable clamps are used, a minimum of three cable clamps must be provided. U-shaped clamps shall not be acceptable.

(e) Where passed around a metal or other object less than three times the diameter of the cable, have a thimble of the correct size inserted in the eye.

(2) Approved sockets or fittings with the wire properly turned back and babbitted may be used in place of clamps noted in subsection (1)(d) of this section.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-14070 Where must hoistway lights be located? Adequate lighting must be installed and operating at each landing and in the shaftway.

For purposes of this section "adequate lighting" means five-foot candles.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-14080 What additional requirements apply to the installation and operation of hand powered manlifts? (1) Only employees and other authorized personnel may ride in a lift car.

(2) Escape ladders must be installed extending the full length of the hoistway and must be located in a position so that in an emergency a person can safely transfer from the car platform to the ladder. Transfer is considered safe when a person can maintain three points of contact while making the transfer. An "IMPAIRED CLEARANCE" sign must be posted at the bottom of a ladder when the face of the ladder is less than 30 inches from any structure.

(3) An automatic safety device which will prevent the car from leaving the landing until manually released by the operator must be installed at the bottom landing.

(4) A fire extinguisher in proper working condition must be available in the car.

(5) A five-year full load test must be performed and a tag indicating the date and the company conducting the test must be permanently attached with a wire and a seal. Documentation of the test submitted to the department. Manlifts with wooden rails must ((~~perform~~)) have a no-load drop test performed on the equipment.

Qualified people will conduct the test. A qualified person is either:

(a) An elevator mechanic licensed in the appropriate category for the conveyance being tested;

(b) The representative of a firm that manufactured the particular material lift and who holds a current temporary mechanic's license in this state; or

(c) The representative of a firm that manufactured the particular material lift who is working under the direct supervision of an elevator mechanic licensed in the appropriate category for the conveyance being tested.

(6) ((~~An annual~~)) A no load annual safety test must be performed and a tag ((~~with~~)) indicating the date and company conducting the test must be attached to the conveyance with a wire and seal. A safety tag must also be permanently affixed to the inside of the car.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-16040 What requirements apply to the location of electrical wiring, pipes and ducts in hoistways and machine rooms? (1) Only electrical wiring raceways and cables directly related to an elevator's operation may be installed inside the hoistway.

(2) Pipes or ducts that convey gases, vapors, or liquids and are not used in connection with the elevator must not be installed in any hoistway, machine room, or machinery space.

(3) Machinery and sheave beams, supports, and foundations must comply with the American Standard Safety Code for Elevators, Dumbwaiters, Escalators and Moving Walks A17.1, Section ((~~105~~)) 2.9.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-16150 What is the load capacity of a casket lift car? (1) Driving machines, car and counterweight suspension mechanisms, and overhead beams and supports must be able to sustain a car with a structural load capacity based upon its inside net platform area as shown in American Standard Safety Code for Elevators, Dumbwaiters, Escalators and Moving Walks A17.1, Table ((~~207.1~~)) 216.1.

(2) A metal plate which gives the rated load in letters and figures not less than 1/4 inch high stamped, etched or raised on the surface of the plate must be fastened in a conspicuous place in the car.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23100 Are keys required to be on-site? Yes. The keys to the machine room and the keys that are necessary to operate the elevator must be ((~~readily available to authorized personnel.~~

~~NOTE: The department recommends the use of~~)) located in a locked key retainer box in the elevator lobby ((~~at the designated level above the hall buttons or by machine room doors at no more than 6 feet above the floor. This~~)); or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage through locked doors. The key retainer box ((~~should~~)) must be:

- Readily accessible to authorized personnel;
- Clearly labeled "Elevator"; and
- Equipped with a 1-inch cylinder cam lock key #39504.

((~~The department~~)) Further ((~~recommends that~~)):

- Keys for access to elevator machine rooms and for operating elevator equipment ((~~are~~)) must be tagged and kept in the key box.
- The key box must contain((~~s~~)) all keys necessary for inspections of the elevator.
- Mechanical hoistway access devices ((~~are~~)) must be kept in the key box or machine room.

The department may approve existing retainer boxes provided they are:

- Readily accessible to authorized personnel;
- Clearly labeled "elevator"; and
- The lock must be either a 1-inch cylinder cam lock key #39504 or a combination lock. The combination for the lock must be on record with the department.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23101 What is the scope of Subpart I? (1) Subpart I, Hoistways and Related Construction for Electric and Hydraulic Elevators, is the minimum standard for all existing hydraulic and electric elevators. It applies to other equipment only as referenced in the applicable part.

(2) This subpart does not apply to elevators located in grain terminals, residential elevators, or special purpose elevators.

NEW SECTION

WAC 296-96-23117 What requirements apply to top of car railings for traction elevators? A standard railing must be installed on the top of all traction elevators where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds twelve inches horizontal clearance. The railing shall be substantially constructed of metal and shall consist of a top rail, intermediate rail and post. The top rail shall have a smooth surface and the upper surface shall be located at a vertical height of forty-two inches. The intermediate rail shall be located approximately halfway between the top rail and the car top. There must be a minimum of six inches of clearance above the top rail when the car is at its furthest point of travel on inspection mode.

NEW SECTION

WAC 296-96-23118 What requirements apply to top of car railings for hydraulic elevators in unenclosed hoistways? A standard railing must be installed on the top of hydraulic elevators installed in unenclosed hoistways. The railing shall be substantially constructed of metal and shall consist of a top rail, intermediate rail and post. The top rail shall have a smooth surface and, where practical, the upper surface shall be located at a vertical height of forty-two inches. The intermediate rail shall be located approximately halfway between the top rail and the car top. There must be a minimum of six inches of clearance above the top rail when the car is at its furthest point of travel on inspection mode.

NEW SECTION

WAC 296-96-23119 What signage requirements apply to traction elevators with minimal overhead clearance? Traction elevators that do not have a minimum of twenty-four inches of clearance from the crosshead, or any equipment mounted on the crosshead, to the lowest member of the overhead structure in the hoistway when the car has reached its maximum upward movement must have signage. A sign must be located near the top of car inspection station. An additional sign must be posted on the hoistway wall. This sign must be visible when accessing the car top. The sign shall consist of alternating four-inch diagonal red and white stripes and must clearly state "danger low clearance" in lettering not less than four inches in height.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23151 What requirements apply to hoistway door closing devices? (1) Horizontally sliding doors on automatic-operation elevators must be equipped with door closers that automatically close an open door if the car for any reason leaves the landing zone.

(2) Horizontal swinging single or center-opening doors on automatic-operation elevators must be self-closing.

(3) Door closers are not required for the swinging portion of combination horizontally sliding and swinging doors.

(4) On center-opening doors that utilize relating cables if the cabling fails or when the cabling is replaced a method shall be provided to ensure that both doors automatically close if the car for any reason leaves the landing zone.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23240 What is the minimum rated load for passenger elevators? The rated load in pounds for passenger elevators must be based on the inside net platform areas and must be not less than shown in the table below. The inside net platform areas must be determined as shown in ((~~Table 3.7.1~~)) the table below which shows the maximum inside net platform areas for the various common rated loads. If other rated loads are used, they must be at least the following:

(1) For an elevator with an inside net platform area of no more than 50 feet squared, W = 0.667A squared + 66.7A.

(2) For an elevator with an inside net platform area of more than 50 feet squared, W = 0.0467A squared + 125A - 1367.

NOTE: A = inside net platform area, ft. squared
W = minimum rated load, lb.

MAXIMUM* INSIDE NET PLATFORM AREAS FOR THE VARIOUS RATED LOADS

Rated Load, lb.	Inside Net Platform Area, ft^2	Rated Load, lb.	Inside Net Platform Area, ft^2
500	7.0	5,000	50.0
600	8.3	6,000	57.7
700	9.6	7,000	65.3
1,000	13.25	8,000	72.9
1,200	15.6	9,000	80.5
1,500	18.9	10,000	88.0
1,800	22.1	12,000	103.0
2,000	24.2	15,000	125.1
2,500	29.1	18,000	146.9
3,000	33.7	20,000	161.2
3,500	38.0	25,000	196.5
4,000	42.2	30,000	231.0
4,500	46.2		

*To allow for variations in cab designs, an increase in the maximum inside net platform area not exceeding 5% will be permitted for the various rated loads.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23270 What requirements apply to car top operating devices? (1) Elevators with automatic or continuous-pressure operation must have a continuous-pressure button operating switch mounted on the car top for the purpose of operating the car solely from the top of the car. The device must operate the car at a speed not exceeding 150 feet per minute.

(2) The means for transferring the control of the elevator to the top-of-car operating device must be on the car top and located between the car crosshead and the side of the car nearest the hoistway entrance normally used for access to the car top.

(3) A top of car operating station must be installed on all existing elevators which have more than fifteen feet of travel.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23287 What requirements apply to suspension rope equalizers? Suspension rope equalizers, where provided, must be of the individual-compression spring type.

Equalizers of other types may be used with traction elevators provided the equalizers and fastenings are approved by the authority having jurisdiction on the basis of adequate tensile and fatigue tests made by a qualified laboratory. Such tests must show the ultimate strength of the equalizer and its fastenings in its several parts and assembly, which must be no less than 10 percent in excess of the strength of suspension ropes, provided that equalizers of the single-bar type, or springs in tension, must not be used to attach suspension ropes to cars or counterweights or to dead-end hitch plates.

EXCEPTION: The requirements of this section do not apply to rope equalizers that meet Rule 2.20.5 in ASME A17.1-2000.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23610 What requirements apply to routine periodic inspections and tests? The owner or the owner's agent must ensure that her/his conveyances are inspected and tested periodically by a person qualified to perform such services((~~, and a report indicating the date of inspection with all pertinent data included must be posted in the machine room unless otherwise specified in ASME A17.1, Part X.~~

~~The inspection and tests must be in compliance with the following sections of ASME A17.1, Part X:~~

~~(a) Section 1000, Rule 1000.1, Rule 1000.2, Rule 1000.3;~~

~~(b) Section 1001, Rule 1001.1, Rule 1001.2;~~

~~(c) Section 1002, Rule 1002.1, Rule 1002.2, Rule 1002.3;~~

~~(d) Section 1004, Rule 1004.2;~~

~~(e) Section 1005, Rule 1005.1, Rule 1005.2, Rule 1005.3, Rule 1005.4;~~

~~(f) Section 1007, Rule 1007.2;~~

~~(g) Section 1008, Rule 1008.1, Rule 1008.2; and~~

~~(h) Section 1010, Rule 1010.1, Rule 1010.2, Rule 1010.3, Rule 1010.4, Rule 1010.5, Rule 1010.6, Rule 1010.7~~)). All conveyances must be tested to the applicable code(s) by an elevator mechanic licensed in the appropriate category for the conveyance being tested.

(1) For annual testing of electric, hydraulic, and roped hydraulic elevators, a log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the qualified person performing the test.

Note: The fire service and smoke detector testing may be performed and logged by the building owner.

(2)(a) For five-year testing of electric, hydraulic and roped hydraulic elevators a full load safety test must be performed with weights.

(b) For roped hydraulic elevators a static load test with the full load on the car must also be performed.

(c) For tests administered under this subsection:

(i) A log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the licensed elevator mechanic performing the test.

(ii) A safety tag with the date and company conducting the test must be permanently attached to the governor, safeties, and the rupture valves with a wire and seal.

(iii) Documentation must be submitted to the department.

Note: Separate safety tags must be used to distinguish the no-load annual safety test and the five-year full load test.

(d) Qualified people will conduct the test. A qualified person is either:

(i) An elevator mechanic licensed in the appropriate category for the conveyance being tested;

(ii) The representative of a firm that manufactured the particular material lift, and who holds a current temporary mechanic's license in this state; or

(iii) The representative of a firm that manufactured the particular material lift who is working under the direct supervision of an elevator mechanic licensed in the appropriate category for the conveyance being tested.

Escalators shall be tested and cleaned annually. Upon completion of this work, the appropriate form indicating that the work was done must be submitted to the department.

(3) All other conveyances requiring annual testing must have tags indicating the date and the name of the company who performed the test. When the required location for mounting the tag is not readily accessible, the tag may be mounted on the main line disconnect.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 296-96-01080	How do you appeal a notice of violation?
WAC 296-96-02365	What is required for physically handicapped lifts?
WAC 296-96-11000	What regulations apply to belt manlifts after 1974?